

January 28, 2022

Arizona Department of Environmental Quality
Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007

Attention: Tracy Bunch

Subject: Fourth Quarter 2021 Monitoring Report
Aquifer Protection Permit No. P-101704, LTF 88973

Dear Mr. Bunch:

Florence Copper Inc. (Florence Copper) is submitting this report in accordance with Section 2.7.4.2 of Aquifer Protection Permit (APP) No. P-101704, LTF 88973, dated April 30, 2021, for the Florence Copper Project.

Background Information

The Florence Copper Project is an in-situ copper extraction facility subject to two related permits issued by the Arizona Department of Environmental Quality (ADEQ) and the U.S. Environmental Protection Agency (USEPA).

APP Covering the 1997-98 BHP Pilot Facilities and Future Operations:

- ADEQ APP No. P-101704 (LTF 88973) Significant Amendment dated April 30, 2021, and Other Amendment LTF 88973 dated April 30, 2021.

The authorized facilities and monitoring wells are identified on Figure 1 and the configuration of the Production Test Facility (PTF) wellfield, which was incorporated into the amended December 8, 2020 permit, is shown on Figure 2.

Prior to the amended permit issued on December 8, 2020, the Florence Copper Project was regulated under APP No. P-101704, LTF 65804 dated October 13, 2017.

In 1997, the BHP test wellfield, a small leachate processing facility, and a double-lined evaporation pond were constructed as authorized by APP No. P-101704 in 1997. The Pilot Test Facility operated from October 31, 1997 to February 9, 1998. The test area was rinsed until September 1, 2004. Cessation of hydraulic control for testing was approved by both agencies and the wellfield has since remained inactive. Subsequently, activities related to these facilities took place until the issuance of the amended permit on December 8, 2020.

Underground Injection Control (UIC) Permit Covering the Current PTF:

- USEPA UIC Permit No. R9UIC-AZ3-FY11-1 dated December 20, 2016.

This permit authorizes operation of the PTF and sets forth separate monitoring requirements to be applied at the PTF, which lies within the area covered by the APP. The UIC facilities and monitoring wells are identified on Figure 1. The facility received authorization to proceed with pre-operational activities on July 13, 2017. The PTF wellfield was completed and began operations on December 15, 2018. The rinsing activities for the PTF began on June 26, 2020. Solutions from the wellfield continued to be processed through the Solvent Extraction/Electrowinning (SX/EW) plant to produce copper in the fourth quarter (Q4) until October 29, 2020. Wellfield rinsing activities have continued through Q4 2021.

This report documents monitoring activities required by APP No. P-101704, LTF 88973 during Q4 2021 following the issuance of the amended permit on April 30, 2021. Reporting for the UIC is performed separately; however, some information pertains to multiple permits and is reported accordingly.

Annual Report

Section 2.7.4.1 of the permit requires that an annual report presenting updates to the groundwater model and the results of any liner assessments be submitted no later than 30 days following the end of the calendar year. In accordance with Section 2.5 of the permit, monitoring and data collection to support the annual reporting requirements began in 2021 (the first full monitoring period following permit issuance). Therefore, the first annual report will be submitted in January 2022 under separate cover.

In-Situ Copper Recovery (ISCR) Operations and Monitoring Quarterly Reporting

- **Section 2.7.1 – Self-Monitoring Report Forms (SMRF)**

The completed SMRF for Q4 2021 and the 2021 Annual SMRF have been submitted to the on-line MyDEQ portal.

- **Section 2.7.4.2.1.1 – Graphical Representation of Injected and Recovered Volumes**

The daily cumulative injection and recovery volumes and the daily percent recovery to injection volume values are provided in tabular and graphical format in Attachment 1. Throughout the monitoring period, the extracted volume has consistently exceeded the injected volume by 6 percent or more.

- **Section 2.7.4.2.1.2 – Graphical Representation of the Hydraulic Gradient in the ISCR Wellfield**

The daily average head measurement values for the observation wells and recovery wells are provided in tabular and graphical format in Attachment 2. The hydraulic gradient has been maintained with a greater than 1-foot differential as a daily average for all paired PTF wells throughout the monitoring period.

- **Section 2.7.4.2.1.3– Monthly Potentiometric Surface Maps**

Monthly groundwater elevation contour maps are provided in Attachment 3. A cone of depression displaying inward flow is depicted over the PTF, the only active mining area, in all three contour maps.

- **Section 2.7.4.2.1.4– Well Bore Annular Conductivity Device (ACD) Readings**

The results of the Q4 2021 well bore annular electrical conductivity (EC) monitoring are provided in Attachment 4. Annular EC resistance has remained approximately constant or increased slightly in 8 of the 11 wells since monitoring began in Q3 2018. Annular EC has decreased in wells O-04 and O-06 during that same time. The results of the monitoring indicate the absence of injected fluid at the ACD locations.

- **Section 2.7.4.2.1.5 – Summary of Pressure Transducer and Fracture Gradient Readings**
Monthly maximum, minimum, and average injection pressures for the monitoring period are provided in Attachment 5. There were no exceedances of the fracture gradient during Q4 2021.
- **Section 2.7.4.2.1.6 – Graphical Representation of Fluid EC Readings from Injection and Observation Wells**
Fluid EC values are provided in tabular and graphical format in Attachment 6. As expected, fluid EC in the injection and observation wells was comparable during the monitoring period. Throughout the monitoring period, the PTF wellfield was being rinsed and no injection of ISCR fluids took place.
- **Section 2.7.4.2.1.7 – Description of Deviations from Standard Sampling Protocols**
There were no deviations from standard sampling protocols during the Q4 2021 monitoring event.
- **Section 2.7.4.2.1.8 – Summary of all Exceedances of Alert Levels (AL), Aquifer Quality Limits (AQL), Action Levels, Discharge Limits, or Operational Limits**
Except as noted below, there were no exceedances of AQLs, action levels, discharge limits, or operational limits during this reporting period.

Well M4-O exceeded its magnesium AL for all monthly samples taken during this monitoring period. No other groundwater monitoring ALs or AQLs were exceeded. Refer to Attachment 10 for additional details on the groundwater monitoring AL exceedances at well M4-O.
- **Section 2.7.4.2.1.9 – Time versus Concentration Plots of Select Groundwater Parameters**
Plots of select quarterly monitoring parameter concentrations over time for point of compliance (POC) wells are provided in Attachment 7.
- **Section 2.7.4.2.1.10 – Groundwater Elevation Contour Maps**
A groundwater elevation contour map for the quarterly monitoring period (October 2021), including the groundwater elevation obtained from the underground workings is provided in Attachment 8 of the Q4 2021 quarterly compliance monitoring report.
- **Section 2.7.4.2.1.11 – Fissure Inspection Summary**
Routine visual observations found no ground surface cracks or earth fissures in or around the PTF during the monitoring period.
- **Section 2.7.4.2.1.12 – Table of Wells in the Discharge Impact Area**
A table of all monitoring wells within the Discharge Impact Area, including location, depth of well, depth to water, and water level elevation, is provided in Attachment 9.
- **Section 2.7.4.2.1.13 – Summary of All Monitoring Wells Replaced**
No monitoring wells were replaced during the monitoring period.
- **Section 2.7.4.2.1.14 – Groundwater Sampling Results for POC wells**
The results of Q4 2021 groundwater monitoring of the POC wells are presented in Attachment 10.
- **Section 2.7.4.2.1.15 – Copies of Reports Submitted to the USEPA for the UIC**
As required, a copy of the quarterly monitoring report submitted to the USEPA for UIC Permit No. R9UIC-AZ3-FY11-1 is being submitted under a separate cover.
- **Section 2.7.4.2.1.16 – Resource Block Status Report**
A resource block status summary table is provided in Attachment 11.

- **Section 2.7.4.2.1.17 – Monthly ISCR Wellfield Water Analytical Results**

Monthly analytical results of the treated ISCR wellfield water are provided in Attachment 12.

- **Section 2.7.4.2.2 – Well Abandonment Report**

No wells associated with this permit were abandoned during Q4 2021; therefore, no abandonment report is included for this monitoring period. For future quarterly compliance reports, the Well Abandonment Report will be provided in Attachment 13.

Operational Requirements and Best Available Demonstrated Control Technology Monitoring

The following items address additional operational and monitoring requirements. Some requirements necessitate filing special reports with ADEQ in the event that certain conditions occur. Others require only that relevant information be placed in logs that are to be maintained on site.

In accordance with Section 2.5.2 of the permit, permitted facilities are inspected for the performance levels listed in Section 4.2, Table 10 of APP No. P-101704. Records of operational monitoring and inspections are maintained in the facility log. A summary of the operational status of the listed facilities is presented in Table 10 below. Weather and road conditions may have precluded daily observations on a small number of occasions due to safety concerns.

Table 10. Operational Monitoring and Inspections for APP No. P-101704, LTF 88973

Facility Category	Facility Name	Operational Inspection
Process solution impoundments	PTF process water impoundment PLS pond Raffinate Pond BHP Pond Water impoundments 1 through 5	At present, only the PTF process water impoundment and BHP Pond have been constructed. The PTF process water impoundment was inspected daily and was compliant with the operational monitoring requirements throughout the monitoring period. The BHP Pond became operational in Q3 2021. Once operational, the BHP Pond was inspected daily and was compliant with the operational requirements listed in Table 10.
Lined Non-Stormwater Containment Pond	PTF run-off pond Run-off pond	At present, only the PTF run-off pond has been constructed. The PTF run-off pond was inspected weekly and was compliant with the applicable operational requirements during the monitoring period.
Stormwater control structures	Sitewide stormwater ditches	Monthly inspections were conducted in Q4 2021 in accordance with Section 2.5, and the facilities were compliant with operational requirements.
Groundwater monitor wells	Sitewide monitoring wells	Quarterly inspections were conducted in Q4 2021 in accordance with Section 2.5, and the facilities were compliant with operational requirements.
Pumps	Barge pumps Run-off transfer pumps Sump Pumps Discharge Pump Transfer pump to BHP Pond Evaporator pumps	The only applicable operating pumps are the sump pumps at the PTF process water impoundment and BHP Pond. Both pumps were inspected weekly and were compliant with the operational requirements throughout the monitoring period.
In-situ area injection and recovery resource blocks	PTF wellfield ISCR area	These facilities were inspected daily and no leakage from pipelines, manifolds, or wellheads was reported during the monitoring period.

Table 10. Operational Monitoring and Inspections for APP No. P-101704, LTF 88973		
Facility Category	Facility Name	Operational Inspection
In-situ area injection and recovery resource blocks	PTF wellfield ISCR area	Quarterly inspections were conducted in Q4 2021 in accordance with Section 2.5, and no evidence of subsidence/fissures was reported.
Notes:		
ADEQ = Arizona Department of Environmental Quality ISCR = In-situ copper recovery PLS = pregnant leach solution PTF = Production Test Facility		

The contents of this report are believed to be accurate and complete based upon the data submitted to me and reviewed by me. Please call (520) 316-3710 should you have any questions concerning this report.

Sincerely,
Florence Copper Inc.

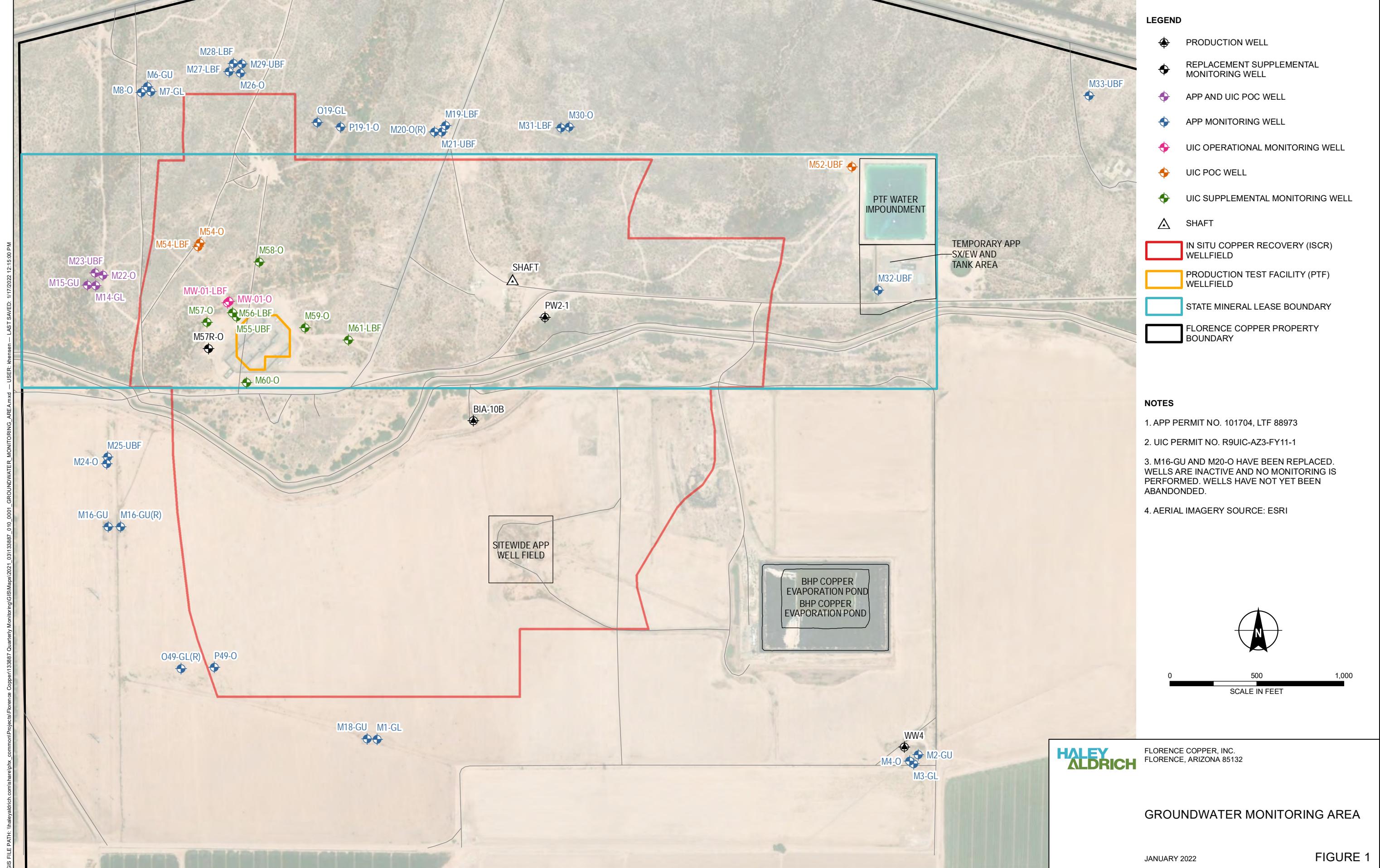


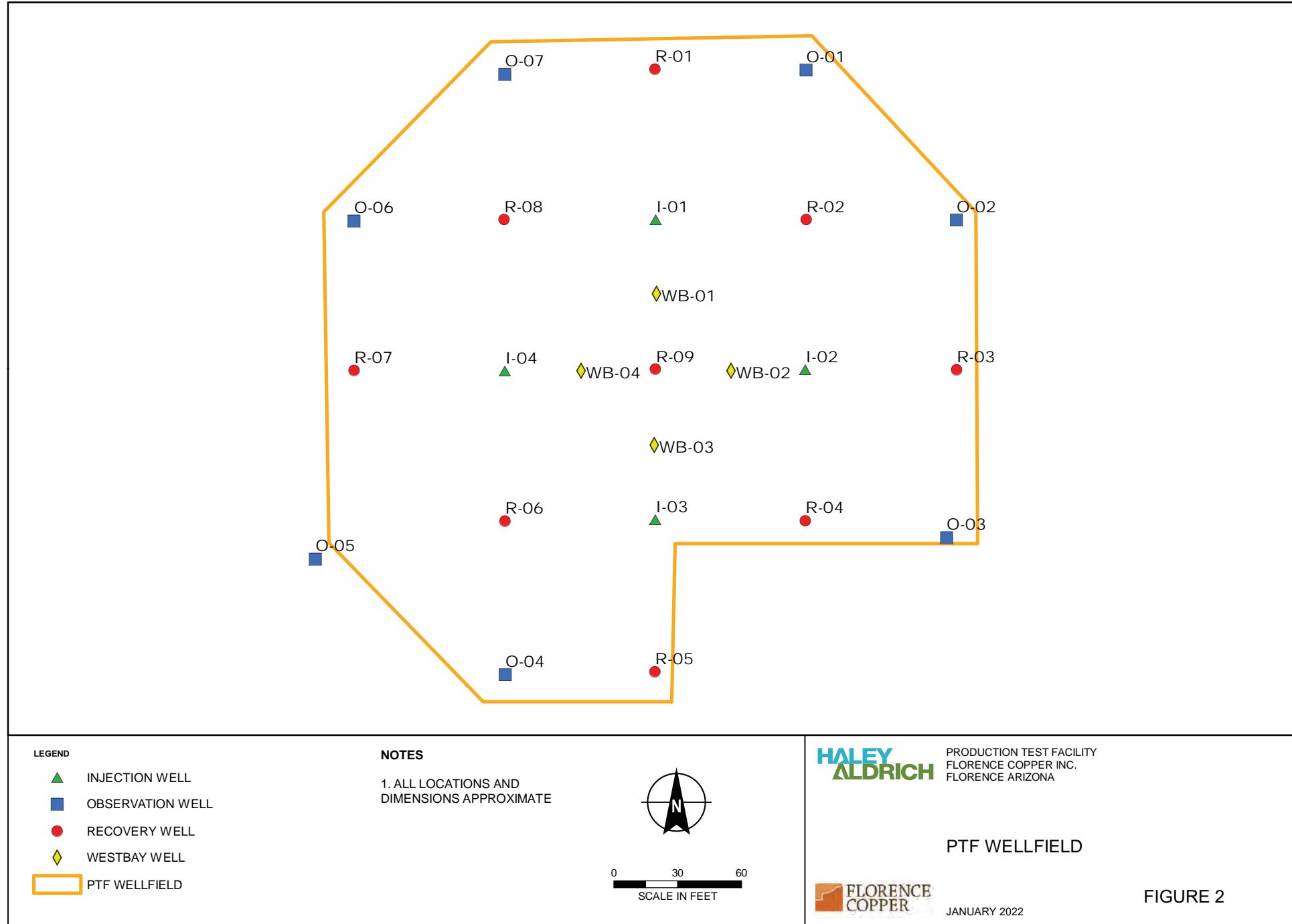
Brent Berg
General Manager

Enclosures:

- Figure 1 – Groundwater Monitoring Area
- Figure 2 – PTF Wellfield
- Attachment 1 – Graphical Representation of Injected and Recovered Volumes
- Attachment 2 – Graphical Representation of the Hydraulic Gradient in the ISCR Wellfield
- Attachment 3 – Monthly Potentiometric Surface Maps
- Attachment 4 – Well Bore Annular Conductivity Device Readings
- Attachment 5 – Summary of Pressure Transducer and Fracture Gradient Readings
- Attachment 6 – Graphical Representation of Fluid Electrical Conductivity Readings from Injection and Observations Wells
- Attachment 7 – Time versus Concentration Plots of Select Groundwater Parameters
- Attachment 8 – Quarterly Groundwater Elevation Contour Map
- Attachment 9 – Table of Wells in the Discharge Impact Area
- Attachment 10 – 10A – Groundwater Sampling Results for POC Wells
10B – Summary of Quarterly Water Levels
- Attachment 11 – Resource Block Status Report
- Attachment 12 – Monthly ISCR Wellfield Water Analytical Results
- Attachment 13 – Well Abandonment Report (Not Applicable for this Monitoring Period)

FIGURES





ATTACHMENT 1

Graphical Representation of Injected and Recovered Volumes

Q4 2021 DAILY INJECTION AND RECOVERY

Page 1 of 3

VOLUMES WITH PERCENT RECOVERY

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 1. October 2021 Daily Injection and Recovery Volumes

Date	Daily Injection Volume (gallons)	Daily Recovery Volume (gallons)	Ratio Recovery/Injection	Min % recovery
10/1/2021	145,900	289,700	1.99	199
10/2/2021	145,900	288,600	1.98	198
10/3/2021	145,300	330,800	2.28	228
10/4/2021	144,000	329,030	2.28	228
10/5/2021	144,600	319,734	2.21	221
10/6/2021	144,300	326,110	2.26	226
10/7/2021	144,500	325,600	2.25	225
10/8/2021	144,600	326,300	2.26	226
10/9/2021	141,600	320,350	2.26	226
10/10/2021	85,600	242,000	2.83	283
10/11/2021	83,300	241,980	2.90	290
10/12/2021	78,500	180,700	2.30	230
10/13/2021	33,000	138,300	4.19	419
10/14/2021	0	126,850	NA	NA
10/15/2021	0	148,420	NA	NA
10/16/2021	61,200	218,260	3.57	357
10/17/2021	73,300	227,800	3.11	311
10/18/2021	73,300	227,500	3.10	310
10/19/2021	73,300	228,330	3.12	312
10/20/2021	73,300	227,800	3.11	311
10/21/2021	73,000	225,700	3.09	309
10/22/2021	22,000	173,800	7.90	790
10/23/2021	0	149,500	NA	NA
10/24/2021	0	139,100	NA	NA
10/25/2021	0	153,230	NA	NA
10/26/2021	0	155,940	NA	NA
10/27/2021	70,500	211,810	3.00	300
10/28/2021	72,900	225,110	3.09	309
10/29/2021	73,000	227,010	3.11	311
10/30/2021	43,900	190,640	4.34	434
10/31/2021	0	151,940	NA	NA
OCT Averages	73,897	227,998	3.02	302

OCT Averages	Monthly Average Injection Volume (GPM)	Monthly Average Recovery Volume (GPM)
	51	158

Notes:

% = percent

NA = Ratio not available, no injection while recovery remained consistent

GPM = gallons per minute

Injection flows were adjusted as part of rinsing program in October, with selected wells operated on different days as part of the wellfield rinsing plan or due to reverse osmosis system maintenance. All injection wells inactive on 10/14, 10/15, 10/23, 10/24, 10/25, 10/26, and 10/31.

Q4 2021 DAILY INJECTION AND RECOVERY

Page 2 of 3

VOLUMES WITH PERCENT RECOVERY

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 2. November 2021 Daily Injection and Recovery Volumes

Date	Daily Injection Volume (gallons)	Daily Recovery Volume (gallons)	Ratio Recovery/Injection	Min % recovery
11/1/2021	0	151,800	NA	NA
11/2/2021	61,900	210,490	3.40	340
11/3/2021	72,300	226,600	3.13	313
11/4/2021	72,200	226,900	3.14	314
11/5/2021	68,400	220,700	3.23	323
11/6/2021	58,500	220,000	3.76	376
11/7/2021	0	202,400	NA	NA
11/8/2021	50,000	281,100	5.62	562
11/9/2021	76,600	299,800	3.91	391
11/10/2021	72,300	227,700	3.15	315
11/11/2021	72,800	196,200	2.70	270
11/12/2021	73,000	178,400	2.44	244
11/13/2021	73,400	162,700	2.22	222
11/14/2021	73,200	161,800	2.21	221
11/15/2021	72,900	160,600	2.20	220
11/16/2021	73,000	163,610	2.24	224
11/17/2021	72,900	164,130	2.25	225
11/18/2021	73,500	143,130	1.95	195
11/19/2021	73,200	166,100	2.27	227
11/20/2021	73,200	173,400	2.37	237
11/21/2021	68,100	163,500	2.40	240
11/22/2021	58,400	162,900	2.79	279
11/23/2021	43,600	149,210	3.42	342
11/24/2021	73,100	225,300	3.08	308
11/25/2021	73,100	226,300	3.10	310
11/26/2021	73,100	221,100	3.02	302
11/27/2021	73,600	222,300	3.02	302
11/28/2021	73,300	226,500	3.09	309
11/29/2021	74,000	206,400	2.79	279
11/30/2021	74,300	199,700	2.69	269
NOV Averages	64,930	198,026	2.91	291

NOV Averages	Monthly Average Injection Volume (GPM)	Monthly Average Recovery Volume (GPM)
	45	138

Notes:

% = percent

NA = Ratio not available, no injection while recovery remained consistent

GPM = gallons per minute

11/1/2021 No injection as part of rinsing plan

Q4 2021 DAILY INJECTION AND RECOVERY

Page 3 of 3

VOLUMES WITH PERCENT RECOVERY

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 3. December 2021 Daily Injection and Recovery Volumes

Date	Daily Injection Volume (gallons)	Daily Recovery Volume (gallons)	Ratio Recovery/Injection	Min % recovery
12/1/2021	60,600	179,200	2.96	296
12/2/2021	44,100	175,700	3.98	398
12/3/2021	0	159,600	NA	NA
12/4/2021	0	170,800	NA	NA
12/5/2021	0	195,700	NA	NA
12/6/2021	45,800	199,440	4.35	435
12/7/2021	128,500	245,290	1.91	191
12/8/2021	148,900	317,600	2.13	213
12/9/2021	148,100	353,400	2.39	239
12/10/2021	145,400	344,020	2.37	237
12/11/2021	141,300	352,300	2.49	249
12/12/2021	140,800	352,300	2.50	250
12/13/2021	141,600	342,040	2.42	242
12/14/2021	141,700	341,200	2.41	241
12/15/2021	143,300	341,800	2.39	239
12/16/2021	137,000	331,900	2.42	242
12/17/2021	147,000	354,800	2.41	241
12/18/2021	145,800	352,440	2.42	242
12/19/2021	145,800	346,000	2.37	237
12/20/2021	143,500	369,900	2.58	258
12/21/2021	144,700	399,900	2.76	276
12/22/2021	144,900	397,500	2.74	274
12/23/2021	144,600	396,000	2.74	274
12/24/2021	144,700	394,800	2.73	273
12/25/2021	144,400	394,800	2.73	273
12/26/2021	142,600	396,400	2.78	278
12/27/2021	141,800	397,300	2.80	280
12/28/2021	142,200	374,300	2.63	263
12/29/2021	144,800	373,600	2.58	258
12/30/2021	145,200	391,100	2.69	269
12/31/2021	142,400	396,300	2.78	278
DEC Averages	120,371	327,014	2.66	266

DEC Averages	Monthly Average Injection Volume (GPM)	Monthly Average Recovery Volume (GPM)
	84	227

Notes:

% = percent

NA = Ratio not available, no injection while recovery remained consistent

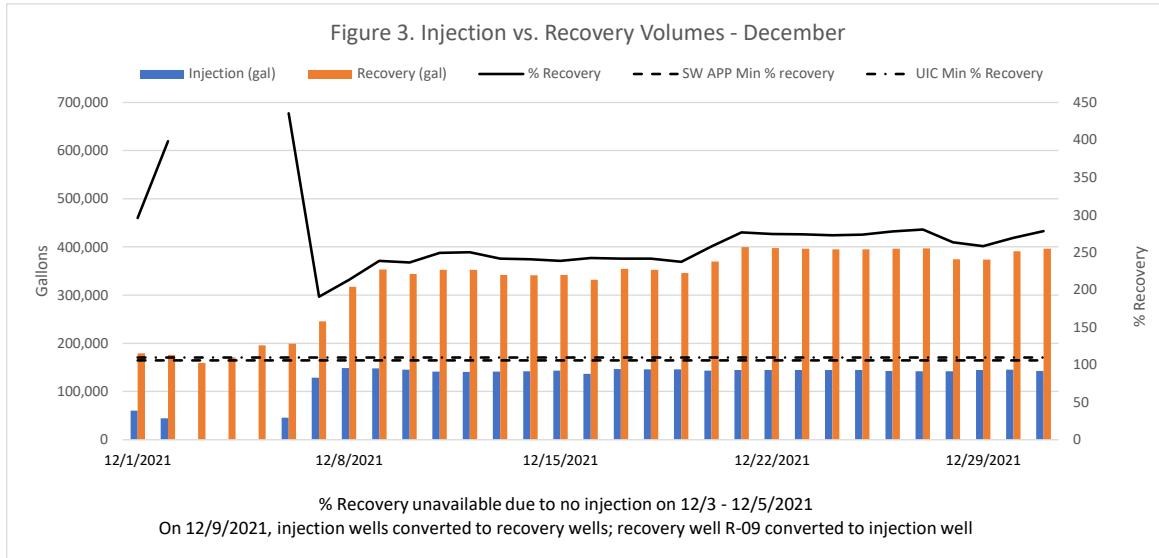
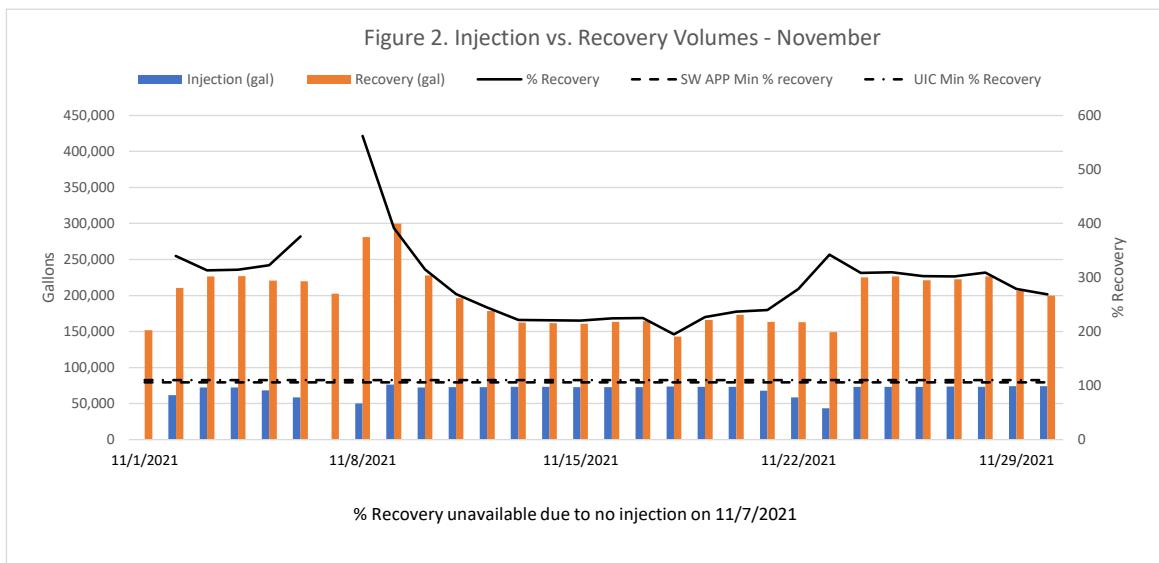
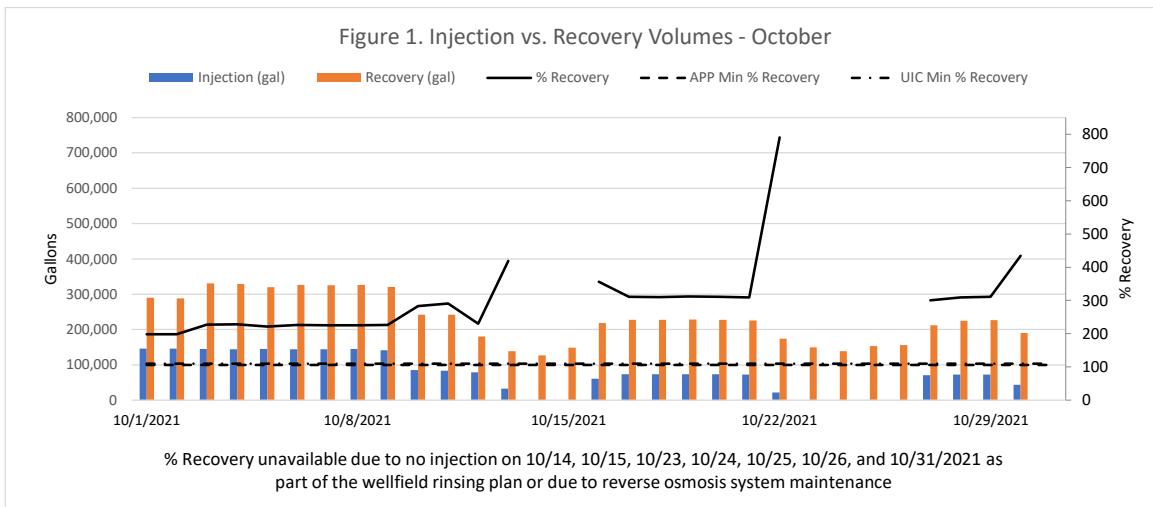
GPM = gallons per minute

12/3 - 12/5/2021: No Injection per rinsing plan

12/8/2021 Recovery well R-09 converted to injection well.

12/8/2021 I-02 and I-03 begin operation as recovery wells

12/8/2021 I-01 and I-04 converted to recovery wells but do not start operation until 12/20/2021



ATTACHMENT 2

Graphical Representation of the Hydraulic Gradient in the ISCR Wellfield

OBSERVATION AND RECOVERY WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 1. October 2021 Daily Average Water Level Elevations

Date	R-01	O-01	O-07	R-02	O-01	O-02	R-03	O-02	O-03	R-04	O-03	R-05	O-04	R-06	O-04	O-05	R-07	O-05	O-06	R-08	O-06	O-07	R-09
10/1/2021	1208.04	1214.74	1220.74	1191.07	1214.74	1205.77	1140.42	1205.77	1212.40	1135.23	1212.40	1175.23	1224.82	1171.50	1224.82	1222.28	1216.45	1222.28	1220.88	1213.22	1220.88	1220.74	1199.37
10/2/2021	1212.86	1219.37	1225.51	1197.38	1219.37	1213.17	1140.42	1213.17	1217.86	1132.74	1217.86	1163.26	1228.82	1172.27	1228.82	1226.58	1220.58	1226.58	1225.55	1218.03	1225.55	1225.51	1207.28
10/3/2021	1207.51	1213.15	1220.96	1189.40	1213.15	1204.55	1139.88	1204.55	1211.42	1126.22	1211.42	1154.71	1225.95	1165.02	1225.95	1223.16	1216.76	1223.16	1221.45	1212.63	1221.45	1220.96	1195.21
10/4/2021	1210.87	1214.76	1222.60	1191.17	1214.76	1205.49	1139.88	1205.49	1209.73	1125.61	1209.73	1152.02	1226.38	1165.49	1226.38	1224.14	1218.13	1224.14	1222.92	1214.75	1222.92	1222.60	1196.94
10/5/2021	1210.87	1216.56	1224.16	1193.06	1216.56	1207.03	1139.88	1207.03	1210.96	1127.46	1210.96	1152.65	1227.49	1169.93	1227.49	1225.48	1219.62	1225.48	1224.37	1216.98	1224.37	1224.16	1198.45
10/6/2021	1209.60	1215.92	1223.58	1192.27	1215.92	1206.32	1139.88	1206.32	1210.34	1125.80	1210.34	1150.87	1227.18	1168.97	1227.18	1225.11	1219.21	1225.11	1223.88	1216.24	1223.88	1223.58	1197.78
10/7/2021	1210.25	1216.65	1224.15	1193.26	1216.65	1206.93	1139.88	1206.93	1211.13	1125.57	1211.13	1151.15	1227.78	1169.53	1227.78	1225.74	1219.81	1225.74	1224.49	1216.79	1224.49	1224.15	1198.54
10/8/2021	1211.15	1217.75	1225.11	1194.15	1217.75	1207.95	1139.91	1207.95	1212.56	1125.56	1212.56	1152.26	1228.81	1170.49	1228.81	1226.72	1220.83	1226.72	1225.47	1217.70	1225.47	1225.11	1199.83
10/9/2021	1211.75	1218.52	1225.67	1197.44	1218.52	1208.66	1139.89	1208.66	1213.68	1131.05	1213.68	1153.17	1229.45	1175.16	1229.45	1227.31	1221.43	1227.31	1226.07	1219.49	1226.07	1225.67	1200.43
10/10/2021	1214.81	1221.86	1227.71	1205.30	1221.86	1212.77	1139.89	1212.77	1219.13	1153.29	1219.13	1159.21	1231.19	1183.77	1231.19	1228.99	1223.12	1228.99	1227.76	1221.61	1227.76	1227.71	1214.51
10/11/2021	1212.05	1218.84	1224.76	1200.61	1218.84	1209.86	1139.83	1209.86	1216.11	1148.89	1216.11	1155.30	1227.73	1174.49	1227.73	1225.66	1219.95	1225.66	1224.71	1217.81	1224.71	1224.76	1212.32
10/12/2021	1215.55	1222.24	1226.88	1212.28	1222.24	1219.43	1143.78	1219.43	1219.81	1156.21	1219.81	1174.44	1228.87	1201.36	1228.87	1227.29	1222.78	1227.29	1226.58	1224.24	1226.58	1226.88	1211.73
10/13/2021	1218.98	1224.14	1228.66	1217.54	1224.14	1226.68	1146.51	1226.68	1222.91	1154.72	1222.91	1191.10	1230.94	1216.21	1230.94	1229.19	1224.96	1229.19	1228.15	1225.72	1228.15	1228.66	1215.40
10/14/2021	1210.61	1221.82	1227.86	1219.46	1221.82	1224.84	1141.98	1224.84	1221.19	1148.47	1221.19	1166.82	1231.52	1216.47	1231.52	1229.57	1225.18	1229.57	1228.23	1226.09	1228.23	1227.86	1230.21
10/15/2021	1209.04	1219.91	1226.73	1201.46	1219.91	1222.75	1140.14	1222.75	1219.85	1147.78	1219.85	1157.47	1231.30	1215.72	1231.30	1229.11	1224.44	1229.11	1227.35	1221.74	1227.35	1226.73	1230.89
10/16/2021	1208.68	1218.31	1225.45	1198.40	1218.31	1221.45	1140.30	1221.45	1220.07	1147.99	1220.07	1163.50	1230.76	1179.74	1230.76	1228.08	1223.35	1228.08	1226.25	1218.16	1226.25	1225.45	1211.78
10/17/2021	1209.24	1218.80	1226.11	1198.43	1218.80	1222.00	1140.04	1222.00	1220.98	1147.57	1220.98	1162.70	1231.53	1175.66	1231.53	1228.80	1224.09	1228.80	1226.95	1218.87	1226.95	1226.11	1210.52
10/18/2021	1209.66	1219.10	1226.47	1198.49	1219.10	1222.26	1140.04	1222.26	1220.34	1147.42	1220.34	1162.60	1232.03	1175.78	1232.03	1229.27	1224.54	1229.27	1227.36	1219.32	1227.36	1226.47	1210.71
10/19/2021	1208.62	1217.59	1225.65	1196.79	1217.59	1216.71	1139.98	1216.71	1219.94	1147.08	1219.94	1161.61	1231.69	1175.07	1231.69	1228.77	1223.92	1228.77	1226.67	1218.63	1226.67	1225.65	1209.71
10/20/2021	1210.04	1219.35	1226.75	1198.53	1219.35	1222.70	1140.09	1222.70	1221.50	1147.24	1221.50	1162.52	1232.55	1175.86	1232.55	1229.52	1224.73	1229.52	1227.55	1219.54	1227.55	1226.75	1211.03
10/21/2021	1211.45	1220.06	1227.45	1199.04	1220.06	1223.38	1140.15	1223.38	1222.10	1147.25	1222.10	1162.98	1233.15	1176.49	1233.15	1230.28	1225.56	1230.28	1228.31	1220.15	1228.31	1227.45	1211.70
10/22/2021	1211.75	1221.46	1228.12	1200.91	1221.46	1224.09	1140.66	1224.09	1221.65	1147.67	1221.65	1165.18	1233.46	1205.52	1233.46	1230.91	1226.19	1230.91	1228.50	1220.54	1228.50	1228.12	1226.76
10/23/2021	1212.30	1221.10	NA	1200.41	1221.10	1223.84	1140.18	1223.84	1221.03	1146.80	1221.03	1162.15	1232.37	1216.70	1232.37	1230.07	1225.40	1230.07	NA	1219.77	NA	NA	1231.71
10/24/2021	1212.43	1221.84	1227.64	1203.76	1221.84	1224.75	1141.46	1224.75	1222.10	1148.09	1222												

Table 2. November 2021 Daily Average Water Level Elevations

Date	R-01	O-01	O-07	R-02	O-01	O-02	R-03	O-02	O-03	R-04	O-03	R-05	O-04	R-06	O-04	O-05	R-07	O-05	O-06	R-08	O-06	O-07	R-09
11/1/2021	1209.28	1220.01	1226.25	1198.84	1220.01	1222.36	1139.93	1222.36	1217.86	1139.20	1217.86	1146.28	1230.30	1214.69	1230.30	1228.23	1223.32	1228.23	1226.17	1219.37	1226.17	1226.25	1229.77
11/2/2021	NA	1219.37	1226.14	1197.71	1219.37	1219.75	1140.17	1219.75	1218.54	1139.59	1218.54	1144.28	1230.25	1188.51	1230.25	1228.04	1223.81	1228.04	1226.23	1219.59	1226.23	1226.14	1214.41
11/3/2021	NA	1217.19	1224.12	1195.18	1217.19	1217.99	1139.90	1217.99	1216.17	1138.08	1216.17	1135.37	1228.46	1175.87	1228.46	1226.17	1222.03	1226.17	1224.39	1217.70	1224.39	1224.12	1208.84
11/4/2021	NA	1216.40	1223.34	1194.22	1216.40	1219.58	1139.89	1219.58	1215.24	1137.60	1215.24	1135.24	1227.53	1174.71	1227.53	1225.28	1221.19	1225.28	1223.55	1216.78	1223.55	1223.34	1207.89
11/5/2021	NA	1216.01	1222.92	1193.76	1216.01	1219.26	1140.23	1219.26	1214.79	1138.63	1214.79	1137.55	1226.70	1176.38	1226.70	1224.52	1220.51	1224.52	1222.93	1216.30	1222.93	1222.92	1208.61
11/6/2021	NA	1214.07	1221.09	1187.05	1214.07	1217.17	1140.04	1217.17	1212.61	1138.05	1212.61	1136.09	1224.70	1171.53	1224.70	1222.51	1218.53	1222.51	1221.06	1213.65	1221.06	1221.09	1206.51
11/7/2021	NA	1209.40	1217.35	1156.34	1209.40	1212.40	1141.06	1212.40	1207.71	1144.19	1207.71	1138.04	1220.42	1140.25	1220.42	1218.14	1214.61	1218.14	1217.12	1214.40	1217.12	1217.35	1207.76
11/8/2021	1185.65	1199.83	1209.86	1119.70	1199.83	1203.78	1139.97	1203.78	1201.70	1142.31	1201.70	1143.96	1214.65	1112.57	1214.65	1211.76	1208.19	1211.76	1210.24	NA	1210.24	1209.86	1180.12
11/9/2021	1185.65	1200.78	1211.16	1121.21	1200.78	1205.04	1139.91	1205.04	1203.41	1142.33	1203.41	1146.42	1216.85	1112.66	1216.85	1213.94	1210.43	1213.94	1212.14	NA	1212.14	1211.16	1183.24
11/10/2021	1196.95	1209.31	1218.01	1176.16	1209.31	1213.61	1139.90	1213.61	NA	1143.59	NA	1153.32	1224.03	1152.55	1224.03	1220.60	1216.77	1220.60	1218.73	NA	1218.73	1218.01	1200.87
11/11/2021	1205.56	1217.28	1224.89	1197.49	1217.28	1221.38	1139.99	1221.38	NA	1145.45	NA	1163.60	1225.13	1176.30	1225.13	1227.18	1223.93	1227.18	1225.52	NA	1225.52	1224.89	1211.85
11/12/2021	1207.78	1220.12	1227.30	1199.14	1220.12	1223.39	1139.92	1223.39	NA	1144.46	NA	1155.36	1228.73	1172.58	1228.73	1228.84	1226.21	1228.84	1227.75	NA	1227.75	1227.30	1210.59
11/13/2021	1212.46	1224.64	1231.20	1202.61	1224.64	1227.90	1139.89	1227.90	NA	1143.89	NA	1152.60	1232.27	1172.05	1232.27	1231.81	1229.49	1231.81	1231.27	NA	1231.27	1231.20	1233.90
11/14/2021	1214.17	1225.87	1232.23	1203.71	1225.87	1229.11	1139.91	1229.11	NA	1144.01	NA	1153.42	1234.92	1172.69	1234.92	1232.66	1230.49	1232.66	1232.24	NA	1232.24	1232.23	1240.43
11/15/2021	1215.24	1225.64	1231.89	1203.66	1225.64	1229.02	1139.89	1229.02	NA	1143.90	NA	1153.07	1234.74	1171.98	1234.74	1232.30	1229.47	1232.30	1231.76	NA	1231.76	1231.89	1240.05
11/16/2021	1214.13	1224.80	1231.51	1203.32	1224.80	1228.70	1139.86	1228.70	NA	1144.02	NA	1155.73	1234.26	1173.50	1234.26	1231.84	1228.65	1231.84	1231.38	NA	1231.38	1231.51	1239.78
11/17/2021	1213.64	1224.70	1231.31	1205.03	1224.70	1229.09	1140.33	1229.09	NA	1145.57	NA	1162.08	1234.69	1220.86	1234.69	1232.27	1229.76	1232.27	1231.56	NA	1231.56	1231.31	1240.82
11/18/2021	1220.21	1224.35	1230.03	1201.50	1224.35	1226.45	1139.90	1226.45	NA	1143.34	NA	1155.54	1232.90	1219.39	1232.90	1230.71	1226.87	1230.71	1229.76	1200.34	1229.76	1230.03	1238.08
11/19/2021	1207.25	1219.88	1226.33	1197.17	1219.88	1222.48	1139.89	1222.48	NA	1142.46	NA	1151.05	1230.52	1206.31	1230.52	1227.58	1223.94	1227.58	1226.42	1214.93	1226.42	1226.33	1233.95
11/20/2021	1209.61	1221.34	1227.61	1199.16	1221.34	1224.53	1139.88	1224.53	NA	1143.47	NA	1154.57	1232.59	1217.94	1232.59	1229.32	1225.63	1229.32	1228.15	1213.96	1228.15	1227.61	1236.16
11/21/2021	1211.10	1222.71	1228.93	1201.75	1222.71	1226.42	1140.14	1226.42	NA	1144.44	NA	1158.59	1234.66	1219.47	1234.66	1231.01	1227.22	1231.01	1229.62	1213.72	1229.62	1228.93	1237.41
11/22/2021	1211.96	1223.52	1229.61	1202.35	1223.52	1226.54	1140.17	1226.54	NA	1144.62	NA	1159.72	1235.35	1219.88	1235.35	1231.68	1227.80	1231.68	1230.29	1213.42	1230.29	1229.61	1237.81
11/23/2021	1208.21	1219.53	1226.16	1198.88	1219.53	1222.37	1143.23	1222.37	NA	1144.68	NA	1158.65	1232.93	1215.13	1232.93	1228.51	1224.93	1228.51	1226.97	1205.32	1226.97	1226.16	1231.38
11/24/2021	1206.89	1217.47	1224.54	1196.46	1217.47	1220.37	1140.19	1220.37	NA	1145.50	NA	1160.91	1232.12	1185.58	1232.12	1227.30	1223.42	1227.30	1225.59	1207.70	1225.59	1224.54	1210.03
11/25/2021	1208.35	1218.62	1225.18	1197.92	1218.62	1222.26	1140.																

OBSERVATION AND RECOVERY WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 3. December 2021 Daily Average Water Level Elevations

Date	R-01	O-01	O-07	R-02	O-01	O-02	R-03	O-02	O-03	R-04	O-03	R-05	O-04	R-06	O-04	O-05	R-07	O-05	O-06	R-08	O-06	O-07	R-09
12/1/2021	1211.67	1221.61	1228.31	1204.32	1221.61	1225.12	1142.29	1225.12	NA	1148.94	NA	1172.82	1235.86	1187.17	1235.86	1231.16	NA	1231.16	1229.52	1208.25	1229.52	1228.31	1217.03
12/2/2021	1212.39	1223.87	1230.34	1204.41	1223.87	1227.31	1143.03	1227.31	1221.68	1149.06	1221.68	1171.76	1237.29	1199.64	1237.29	1232.86	NA	1232.86	1231.41	1213.99	1231.41	1230.34	1218.32
12/3/2021	1210.47	1220.39	1227.80	1199.86	1220.39	1224.19	1141.67	1224.19	1218.77	1148.38	1218.77	1169.97	1236.07	1211.51	1236.07	1231.22	NA	1231.22	1229.13	1214.69	1229.13	1227.80	1214.09
12/4/2021	1210.73	1220.63	1228.04	1199.79	1220.63	1224.39	1141.53	1224.39	1218.91	1147.57	1218.91	1168.96	1235.92	1199.15	1235.92	1231.21	NA	1231.21	1229.34	1217.21	1229.34	1228.04	1214.07
12/5/2021	1208.43	1218.20	1225.36	1197.27	1218.20	1222.03	1141.08	1222.03	1216.82	1146.76	1216.82	1166.49	1233.95	1185.79	1233.95	1228.90	NA	1228.90	1226.66	1203.09	1226.66	1225.36	1211.14
12/6/2021	1212.21	1221.58	1227.87	1201.14	1221.58	1224.93	1141.48	1224.93	1219.23	1147.11	1219.23	1168.86	1235.27	1183.41	1235.27	1230.39	NA	1230.39	1228.69	1201.09	1228.69	1227.87	1214.83
12/7/2021	1219.11	1229.81	1235.34	1201.80	1229.81	1231.99	1140.69	1231.99	1223.27	1142.80	1223.27	1154.86	1240.01	1184.71	1240.01	1235.88	1232.71	1235.88	1235.43	1213.54	1235.43	1235.34	1223.39
12/8/2021	1213.77	NA	1231.18	1192.44	NA	1228.61	1139.80	1228.61	1210.31	1137.21	1210.31	1137.56	1237.16	1167.51	1237.16	1233.35	1208.88	1233.35	1229.94	1205.81	1229.94	1231.18	1285.89
12/9/2021	1206.57	NA	1227.05	1181.85	NA	1221.19	1139.86	1221.19	1203.67	1135.53	1203.67	1128.38	1232.81	1156.21	1232.81	1228.13	1222.86	1228.13	1227.45	1198.09	1227.45	1227.05	1315.95
12/10/2021	1207.91	NA	1226.93	1180.45	NA	1219.72	1139.91	1219.72	1203.87	1134.58	1203.87	1141.85	1233.00	1159.91	1233.00	1228.17	1222.77	1228.17	1227.36	1197.99	1227.36	1226.93	1310.59
12/11/2021	1205.54	NA	1225.79	1180.90	NA	1220.31	1139.90	1220.31	1202.94	1134.67	1202.94	1133.96	1232.20	1157.22	1232.20	1227.37	1221.91	1227.37	1226.56	1196.80	1226.56	1225.79	1305.17
12/12/2021	1205.53	NA	1225.26	1180.31	NA	1219.88	1139.88	1219.88	1203.37	1134.17	1203.37	1126.19	1231.89	1155.96	1231.89	1227.04	1221.48	1227.04	1226.21	1197.38	1226.21	1225.26	1302.22
12/13/2021	1206.43	NA	1225.56	1181.78	NA	1220.75	1139.89	1220.75	1204.83	1135.58	1204.83	1131.63	1232.53	1157.49	1232.53	1227.64	1222.17	1227.64	1226.82	1202.16	1226.82	1225.56	1300.06
12/14/2021	1212.90	NA	1226.99	1181.52	NA	1221.52	1139.87	1221.52	1204.50	1133.52	1204.50	1125.94	1232.62	1155.50	1232.62	1227.88	1222.42	1227.88	1227.25	1201.50	1227.25	1226.99	1310.50
12/15/2021	1209.14	NA	1226.15	1180.36	NA	1221.46	1139.90	1221.46	1211.35	1133.17	1211.35	1125.21	1232.53	1154.49	1232.53	1227.56	1221.90	1227.56	1226.73	1205.45	1226.73	1226.15	1313.39
12/16/2021	1209.71	NA	1226.23	1182.58	NA	1221.61	1139.96	1221.61	1213.50	1134.00	1213.50	1129.66	1232.53	1157.26	1232.53	1227.60	1222.12	1227.60	1226.74	1204.39	1226.74	1226.23	1308.86
12/17/2021	1209.04	1219.21	1226.25	1180.44	1219.21	1220.90	1139.91	1220.90	1203.96	1131.49	1203.96	1126.99	1232.12	1156.13	1232.12	1227.39	1221.96	1227.39	1226.66	1198.95	1226.66	1226.25	1315.64
12/18/2021	1209.86	1219.26	1225.99	1179.78	1219.26	1220.19	1139.91	1220.19	1202.63	1130.94	1202.63	1120.63	1231.70	1155.44	1231.70	1226.96	1221.52	1226.96	1226.24	1204.39	1226.24	1225.99	1310.53
12/19/2021	1213.29	1220.32	1226.75	1180.61	1220.32	1221.30	1139.91	1221.30	1203.18	1130.68	1203.18	1126.41	1232.12	1155.91	1232.12	1227.50	1222.14	1227.50	1226.92	1208.20	1226.92	1226.75	1309.41
12/20/2021	1209.13	1217.25	1224.59	1179.04	1217.25	1221.29	1139.92	1221.29	1202.79	1131.30	1202.79	1124.79	1230.40	1152.87	1230.40	1225.38	1219.62	1225.38	1224.48	1197.77	1224.48	1224.59	1302.27
12/21/2021	1203.73	1211.69	1220.57	1171.70	1211.69	NA	1139.90	NA	1198.31	1131.26	1198.31	1114.16	1226.84	1149.38	1226.84	1221.40	1215.09	1221.40	1220.00	1195.97	1220.00	1220.57	1295.46
12/22/2021	1205.19	1212.01	1220.85	1175.03	1212.01	NA	1139.89	NA	1196.43	1130.42	1196.43	1111.76	1226.67	1151.71	1226.67	1221.36	1215.32	1221.36	1220.09	1202.54	1220.09	1220.85	1295.44
12/23/2021	1205.99	1212.83	1221.42	1175.19	1212.83	NA	1139.86	NA	1197.64	1130.19	1197.64	1112.45	1227.10	1152.25	1227.10	1221.86	1215.76	1221.86	1220.56	1214.57	1220.56	1221.42	1293.94
12/24/2021	1209.43	1213.38	1221.75	1171.10	1213.38	1214.69	1139.86	1214.69	1198.30	1129.96	1198.30	1112.99	1227.50	1152.81	1227.50	1222.25	1216.24	1222.25	1220.99	1205.68	1220.99	1221.75	1295.75
12/25/2021</td																							

Hydraulic Gradient - Daily Average Water Level Elevations - Observation and Recovery Wells

Figure 1a. Q4 Water Levels

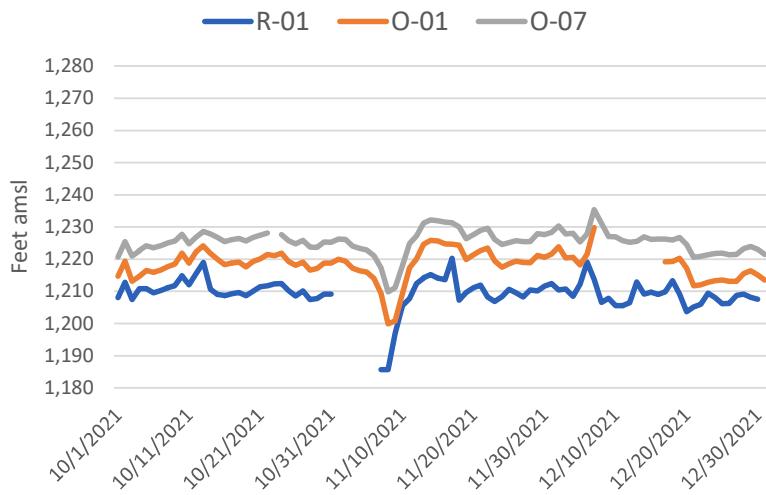


Figure 1b. Q4 Water Levels

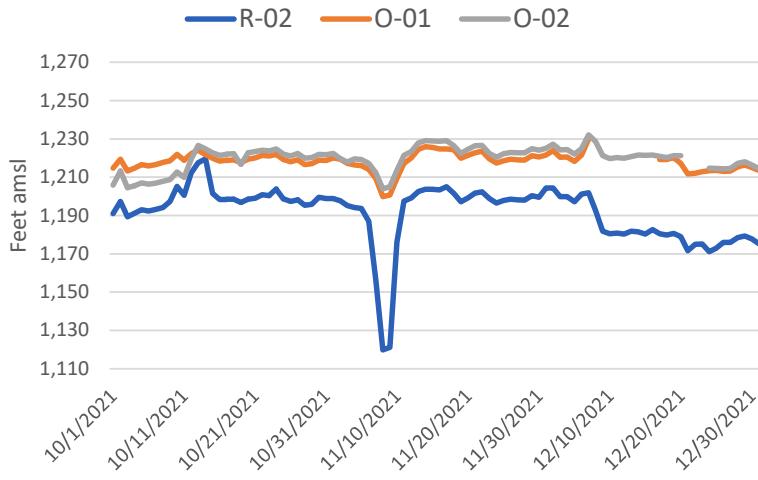


Figure 1c. Q4 Water Levels

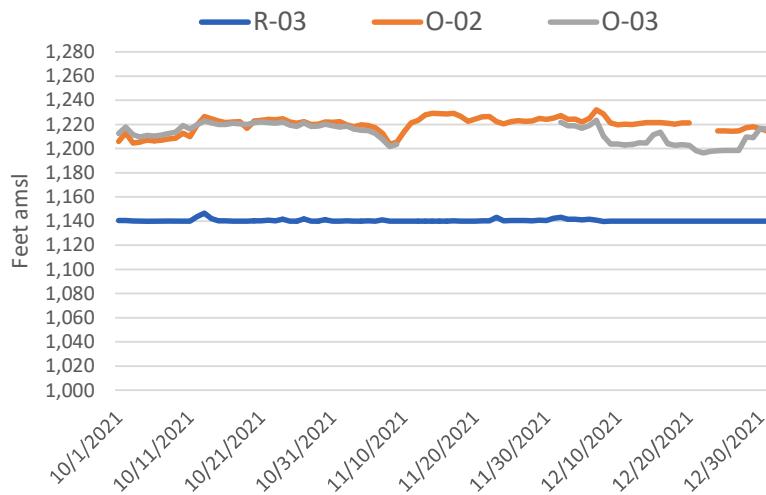
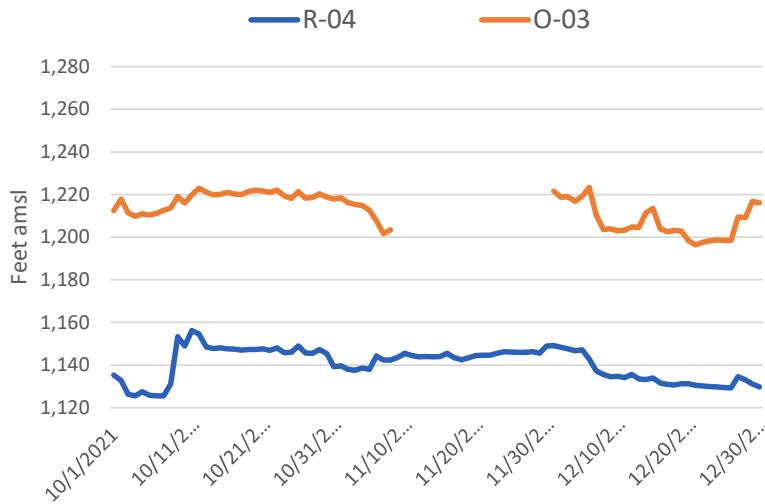


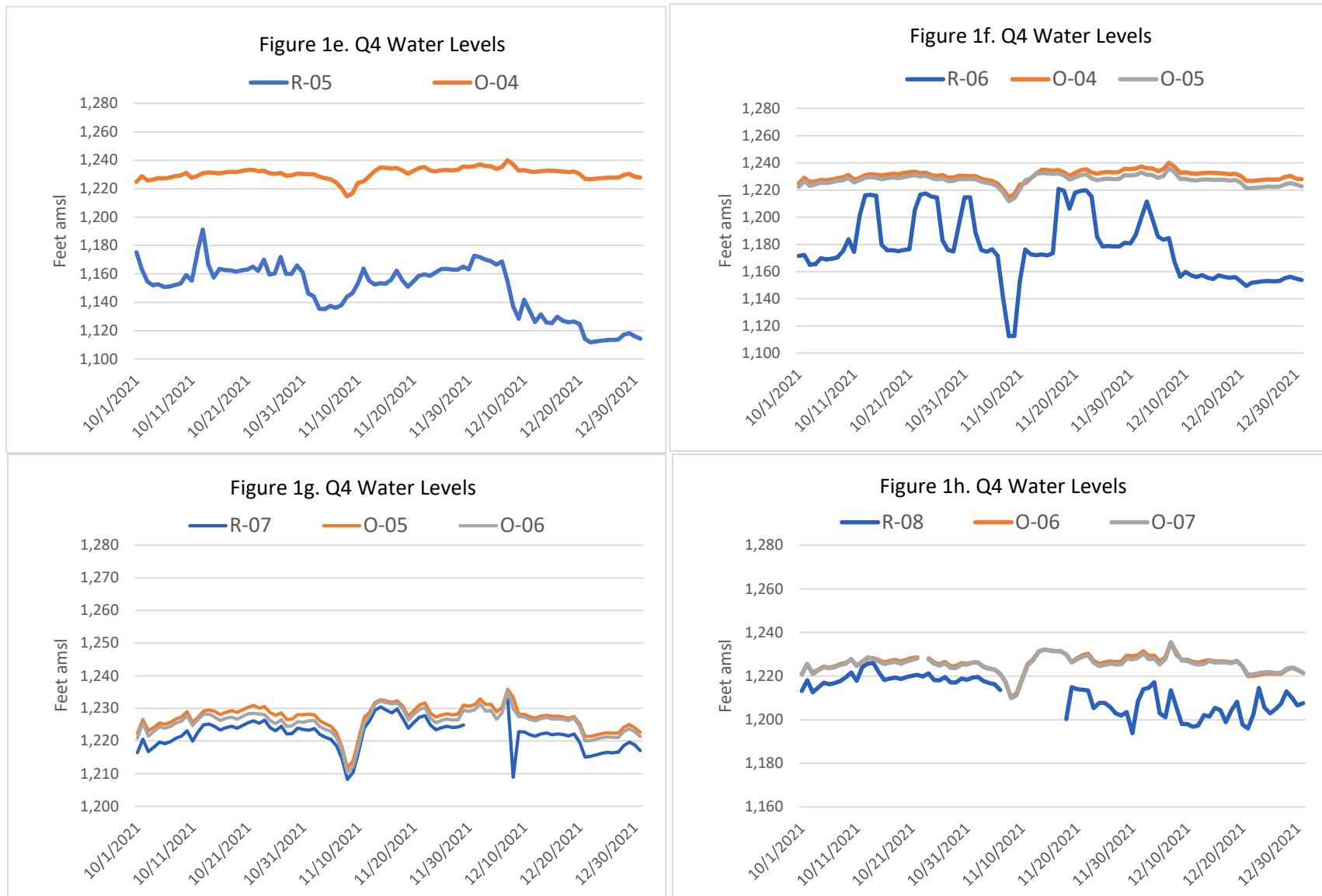
Figure 1d. Q4 Water Levels



Notes:

Refer to preceding Daily Average Water Level Elevations Tables (Tables 1 - 3) for details on missing data points.

Hydraulic Gradient - Daily Average Water Level Elevations - Observation and Recovery Wells



Notes:

Refer to preceding Daily Average Water Level Elevations Tables (Tables 1 - 3) for details on missing data points.

Q4 2021 DAILY HYDRAULIC GRADIENT FOR RECOVERY WELL PAIRINGS

Page 1 of 3

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 4. October 2021 Daily Average Gradients

Date	R-01		R-02		R-03		R-04	R-05	R-06		R-07		R-08		All Gradients <1 foot?
	O-01	O-07	O-01	O-02	O-02	O-03	O-03	O-04	O-04	O-05	O-05	O-06	O-06	O-07	
10/1/2021	6.69	12.69	23.66	14.70	65.35	71.98	77.17	49.59	53.32	50.77	5.83	4.43	7.66	7.52	Yes
10/2/2021	6.51	12.64	21.98	15.78	72.75	77.44	85.12	65.55	56.55	54.31	6.01	4.98	7.53	7.48	Yes
10/3/2021	5.64	13.45	23.76	15.16	64.67	71.53	85.20	71.24	60.93	58.14	6.40	4.68	8.82	8.33	Yes
10/4/2021	3.89	11.73	23.60	14.32	65.61	69.85	84.12	74.37	60.90	58.66	6.01	4.79	8.18	7.86	Yes
10/5/2021	5.68	13.29	23.50	13.97	67.15	71.08	83.50	74.84	57.57	55.55	5.85	4.75	7.39	7.18	Yes
10/6/2021	6.32	13.98	23.65	14.05	66.44	70.46	84.54	76.31	58.21	56.15	5.91	4.68	7.65	7.34	Yes
10/7/2021	6.40	13.90	23.39	13.67	67.04	71.24	85.55	76.63	58.25	56.21	5.93	4.67	7.69	7.36	Yes
10/8/2021	6.61	13.96	23.61	13.80	68.04	72.65	87.00	76.55	58.32	56.23	5.90	4.65	7.77	7.41	Yes
10/9/2021	6.77	13.92	21.08	11.22	68.77	73.79	82.63	76.28	54.29	52.15	5.88	4.64	6.58	6.18	Yes
10/10/2021	7.05	12.90	16.56	7.47	72.88	79.24	65.84	71.98	47.42	45.22	5.87	4.65	6.15	6.10	Yes
10/11/2021	6.79	12.70	18.23	9.25	70.03	76.28	67.22	72.43	53.24	51.17	5.72	4.76	6.90	6.95	Yes
10/12/2021	6.69	11.33	9.96	7.15	75.65	76.03	63.60	54.43	27.50	25.92	4.50	3.80	2.34	2.63	Yes
10/13/2021	5.17	9.68	6.60	9.14	80.17	76.40	68.19	39.85	14.73	12.98	4.23	3.19	2.43	2.94	Yes
10/14/2021	11.21	17.25	2.36	5.38	82.86	79.21	72.72	64.70	15.05	13.10	4.39	3.05	2.14	1.77	Yes
10/15/2021	10.87	17.69	18.45	21.29	82.61	79.71	72.07	73.83	15.58	13.39	4.67	2.91	5.61	4.99	Yes
10/16/2021	9.63	16.78	19.91	23.05	81.15	79.77	72.08	67.25	51.01	48.34	4.73	2.89	8.09	7.29	Yes
10/17/2021	9.55	16.86	20.37	23.57	81.96	80.93	73.41	68.83	55.86	53.13	4.70	2.86	8.09	7.24	Yes
10/18/2021	9.44	16.81	20.61	23.77	82.22	80.30	72.92	69.43	56.25	53.49	4.73	2.82	8.03	7.15	Yes
10/19/2021	8.97	17.03	20.80	19.92	76.73	79.97	72.86	70.07	56.62	53.71	4.86	2.76	8.04	7.02	Yes
10/20/2021	9.31	16.72	20.82	24.17	82.61	81.40	74.25	70.03	56.69	53.66	4.79	2.81	8.00	7.21	Yes
10/21/2021	8.60	15.99	21.02	24.35	83.23	81.94	74.85	70.17	56.66	53.79	4.72	2.75	8.16	7.30	Yes
10/22/2021	9.70	16.37	20.54	23.18	83.44	80.99	73.98	68.28	27.95	25.39	4.72	2.31	7.96	7.58	Yes
10/23/2021	8.80	NA	20.69	23.43	83.66	80.85	74.23	70.23	15.67	13.36	4.67	NA	NA	NA	Yes
10/24/2021	9.41	15.21	18.09	20.99	83.29	80.64	74.01	62.59	15.35	13.18	4.15	1.72	6.84	6.38	Yes
10/25/2021	9.02	15.49	20.62	23.49	82.26	79.49	73.60	71.50	15.81	13.47	4.65	2.24	8.12	7.61	Yes
10/26/2021	9.50	16.19	20.82	23.83	81.13	78.25	72.27	69.90	16.01	13.51	4.70	2.20	7.34	6.76	Yes
10/27/2021	8.97	15.72	20.94	24.25	80.65	79.52	72.38	59.11	47.99	45.50	4.11	1.95	6.92	6.32	Yes
10/28/2021	9.18	16.37	21.26	24.53	79.98	78.44	72.74	69.07	53.20	50.57	4.46	2.33	7.28	6.64	Yes
10/29/2021	9.37	15.95	21.26	24.41	80.37	78.67	73.04	69.36	54.51	51.83	4.41	2.38	7.58	6.61	Yes
10/30/2021	9.72	16.22	19.35	22.49	80.84	79.10	72.93	64.54	35.15	32.73	4.13	1.98	7.09	6.46	Yes
10/31/2021	9.71	16.17	19.98	22.92	81.87	78.92	73.43	69.29	15.73	13.39	4.50	2.23	7.46	7.03	Yes

Notes:

All measurements in elevation above mean sea level.

NA or NM = Not measured or otherwise not available

No data were available for the following dates/wells:

O-06 and O-07 pump and instrumentation pulled all day for well logging tests on October 23, 2021

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 5. November 2021 Daily Average Gradients

Date	R-01		R-02		R-03		R-04	R-05	R-06		R-07		R-08		All Gradients <1 foot?
	O-01	O-07	O-01	O-02	O-02	O-03	O-03	O-04	O-04	O-05	O-05	O-06	O-06	O-07	
11/1/2021	10.73	16.97	21.16	23.51	82.43	77.94	78.66	84.02	15.62	13.54	4.91	2.85	6.80	6.88	Yes
11/2/2021	NA	NA	21.66	22.04	79.58	78.37	78.95	85.98	41.74	39.53	4.23	2.42	6.64	6.55	Yes
11/3/2021	NA	NA	22.01	22.81	78.09	76.27	78.09	93.09	52.60	50.31	4.14	2.36	6.70	6.42	Yes
11/4/2021	NA	NA	22.18	25.36	79.70	75.35	77.63	92.29	52.82	50.57	4.09	2.36	6.77	6.55	Yes
11/5/2021	NA	NA	22.25	25.50	79.03	74.56	76.16	89.15	50.32	48.14	4.01	2.42	6.63	6.62	Yes
11/6/2021	NA	NA	27.02	30.12	77.13	72.57	74.56	88.61	53.17	50.98	3.98	2.53	7.41	7.44	Yes
11/7/2021	NA	NA	53.06	56.06	71.34	66.65	63.53	82.38	80.17	77.89	3.54	2.51	2.72	2.95	Yes
11/8/2021	14.18	24.21	80.13	84.07	63.81	61.73	59.39	70.69	102.08	99.19	3.58	2.05	NA	NA	Yes
11/9/2021	15.13	25.51	79.57	83.84	65.13	63.50	61.08	70.43	104.20	101.28	3.51	1.71	NA	NA	Yes
11/10/2021	12.37	21.06	33.16	37.45	73.71	NA	NA	70.72	71.48	68.05	3.83	1.96	NA	NA	Yes
11/11/2021	11.72	19.33	19.79	23.89	81.39	NA	NA	61.53	48.82	50.87	3.24	1.58	NA	NA	Yes
11/12/2021	12.34	19.52	20.98	24.25	83.47	NA	NA	73.36	56.15	56.27	2.63	1.54	NA	NA	Yes
11/13/2021	12.19	18.74	22.04	25.29	88.01	NA	NA	79.67	60.22	59.76	2.32	1.78	NA	NA	Yes
11/14/2021	11.70	18.06	22.17	25.40	89.20	NA	NA	81.50	62.23	59.97	2.18	1.75	NA	NA	Yes
11/15/2021	10.41	16.66	21.98	25.36	89.12	NA	NA	81.67	62.76	60.32	2.84	2.30	NA	NA	Yes
11/16/2021	10.67	17.38	21.48	25.38	88.83	NA	NA	78.52	60.76	58.34	3.19	2.73	NA	NA	Yes
11/17/2021	11.06	17.67	19.68	24.06	88.76	NA	NA	72.61	13.83	11.41	2.52	1.80	NA	NA	Yes
11/18/2021	4.14	9.82	22.86	24.96	86.55	NA	NA	77.36	13.52	11.33	3.84	2.89	29.42	29.68	Yes
11/19/2021	12.63	19.08	22.71	25.31	82.59	NA	NA	79.48	24.22	21.27	3.64	2.48	11.49	11.40	Yes
11/20/2021	11.73	17.99	22.19	25.37	84.64	NA	NA	78.02	14.65	11.38	3.69	2.53	14.19	13.65	Yes
11/21/2021	11.61	17.83	20.97	24.68	86.28	NA	NA	76.07	15.19	11.53	3.79	2.41	15.90	15.21	Yes
11/22/2021	11.56	17.65	21.17	24.20	86.37	NA	NA	75.63	15.47	11.81	3.88	2.49	16.87	16.19	Yes
11/23/2021	11.32	17.95	20.65	23.49	79.14	NA	NA	74.27	17.79	13.38	3.58	2.04	21.64	20.84	Yes
11/24/2021	10.58	17.64	21.01	23.92	80.18	NA	NA	71.20	46.54	41.72	3.88	2.16	17.89	16.84	Yes
11/25/2021	10.27	16.84	20.69	24.34	81.85	NA	NA	69.53	54.40	49.40	3.93	2.20	18.50	17.45	Yes
11/26/2021	8.71	15.09	20.84	24.46	82.54	NA	NA	69.75	54.38	49.39	3.83	2.20	20.89	19.96	Yes
11/27/2021	9.49	15.90	20.78	24.45	82.31	NA	NA	69.87	54.48	49.62	3.86	2.28	23.48	22.46	Yes
11/28/2021	10.61	17.16	20.78	24.69	82.45	NA	NA	70.26	54.87	49.81	3.93	2.20	24.57	23.47	Yes
11/29/2021	10.76	17.55	20.89	24.65	84.25	NA	NA	70.50	54.33	49.73	6.12	4.46	25.87	24.48	Yes
11/30/2021	10.51	17.51	21.03	24.46	83.59	NA	NA	72.11	54.56	49.97	NA	NA	35.08	33.63	Yes

Notes:

All measurements in elevation above mean sea level.

NA or NM = Not measured or otherwise not available

No data were available for the following dates/wells:

R-01 Redevelopment November 2 - 7, 2021

R-08 Redevelopment November 8 - 17, 2021

O-03 Redevelopment November 10 - 30, 2021

R-07 Redevelopment November 30 - December 6, 2021

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 6. December 2021 Daily Average Gradients

Date	R-01		R-02		R-03		R-04	R-05	R-06		R-07		R-08		All Gradients <1 foot?
	O-01	O-07	O-01	O-02	O-02	O-03	O-03	O-04	O-04	O-05	O-05	O-06	O-06	O-07	
12/1/2021	9.94	16.64	17.30	20.80	82.83	NA	NA	63.04	48.69	43.99	NA	NA	21.26	20.06	Yes
12/2/2021	11.49	17.95	19.46	22.90	84.28	78.65	72.63	65.53	37.65	33.22	NA	NA	17.42	16.35	Yes
12/3/2021	9.92	17.34	20.53	24.33	82.52	77.10	70.38	66.09	24.56	19.71	NA	NA	14.44	13.11	Yes
12/4/2021	9.90	17.32	20.84	24.61	82.87	77.38	71.34	66.96	36.76	32.05	NA	NA	12.13	10.83	Yes
12/5/2021	9.78	16.93	20.93	24.76	80.95	75.74	70.05	67.47	48.16	43.10	NA	NA	23.56	22.26	Yes
12/6/2021	9.37	15.66	20.44	23.78	83.45	77.76	72.12	66.42	51.86	46.98	NA	NA	27.59	26.78	Yes
12/7/2021	10.70	16.23	28.01	30.19	91.30	82.57	80.46	85.14	55.29	51.17	3.17	2.72	21.90	21.80	Yes
12/8/2021	NA	17.42	NA	36.18	88.81	70.51	73.10	99.60	69.65	65.84	24.47	21.06	24.12	25.37	Yes
12/9/2021	NA	20.48	NA	39.34	81.33	63.81	68.14	104.42	76.60	71.92	5.27	4.58	29.36	28.97	Yes
12/10/2021	NA	19.02	NA	39.27	79.82	63.96	69.29	91.15	73.09	68.26	5.40	4.59	29.37	28.94	Yes
12/11/2021	NA	20.24	NA	39.41	80.40	63.04	68.27	98.24	74.98	70.15	5.45	4.64	29.75	28.98	Yes
12/12/2021	NA	19.73	NA	39.58	80.00	63.49	69.20	105.70	75.93	71.08	5.56	4.72	28.82	27.88	Yes
12/13/2021	NA	19.13	NA	38.97	80.86	64.94	69.25	100.90	75.03	70.15	5.47	4.65	24.66	23.40	Yes
12/14/2021	NA	14.09	NA	40.00	81.65	64.63	70.98	106.68	77.13	72.39	5.46	4.83	25.75	25.49	Yes
12/15/2021	NA	17.01	NA	41.10	81.56	71.45	78.18	107.31	78.03	73.07	5.66	4.83	21.28	20.70	Yes
12/16/2021	NA	16.53	NA	39.03	81.65	73.55	79.51	102.87	75.27	70.34	5.48	4.62	22.34	21.84	Yes
12/17/2021	10.17	17.21	38.77	40.46	80.99	64.05	72.47	105.13	75.99	71.26	5.43	4.70	27.71	27.30	Yes
12/18/2021	9.40	16.13	39.48	40.41	80.28	62.71	71.69	105.72	76.26	71.52	5.43	4.72	21.85	21.59	Yes
12/19/2021	7.03	13.46	39.71	40.69	81.39	63.27	72.50	105.71	76.21	71.59	5.37	4.78	18.72	18.55	Yes
12/20/2021	8.12	15.46	38.21	42.25	81.37	62.87	71.49	105.61	77.53	72.51	5.76	4.86	26.71	26.82	Yes
12/21/2021	7.96	16.85	39.99	NA	NA	58.41	67.06	112.68	77.47	72.03	6.31	4.91	24.03	24.61	Yes
12/22/2021	6.82	15.66	36.98	NA	NA	56.55	66.01	114.91	74.96	69.66	6.04	4.77	17.56	18.31	Yes
12/23/2021	6.83	15.43	37.63	NA	NA	57.77	67.44	114.65	74.85	69.61	6.11	4.80	5.99	6.85	Yes
12/24/2021	3.95	12.32	42.28	43.59	74.83	58.44	68.33	114.51	74.69	69.44	6.00	4.75	15.32	16.08	Yes
12/25/2021	5.42	13.80	40.54	41.70	74.78	58.73	68.84	114.40	74.80	69.54	6.04	4.71	18.31	18.98	Yes
12/26/2021	6.92	15.27	37.14	38.39	74.47	58.65	69.05	114.29	74.83	69.49	6.04	4.68	16.22	16.60	Yes
12/27/2021	6.91	15.22	37.26	38.63	74.69	58.72	69.26	114.19	74.78	69.45	5.91	4.53	13.71	14.10	Yes
12/28/2021	6.72	14.51	37.06	38.81	77.40	69.69	75.04	112.47	74.44	69.03	5.69	4.35	9.98	10.35	Yes
12/29/2021	7.25	14.86	37.01	38.66	78.16	69.28	76.04	112.19	74.21	68.85	5.42	4.09	13.62	13.89	Yes
12/30/2021	6.95	14.92	37.26	38.48	76.52	76.90	85.59	112.32	73.61	69.23	5.32	4.04	16.18	16.49	Yes
12/31/2021	6.01	13.95	38.30	39.42	74.85	76.31	86.41	113.60	74.27	68.94	5.68	4.33	13.81	13.92	Yes

Notes:

All measurements in elevation above mean sea level.

NA or NM = Not measured or otherwise not available

No data were available for the following dates/wells:

O-03 Redevelopment December 1, 2021

R-07 Redevelopment November 30 - December 6, 2021

O-01 Redevelopment December 8 - December 16, 2021

O-02 Redevelopment December 21 - 23, 2021

Hydraulic Gradient - Daily Average Water Level Elevations - Observation and Recovery Wells

Figure 1 i. Hydraulic Gradient for Wells Paired with R-01

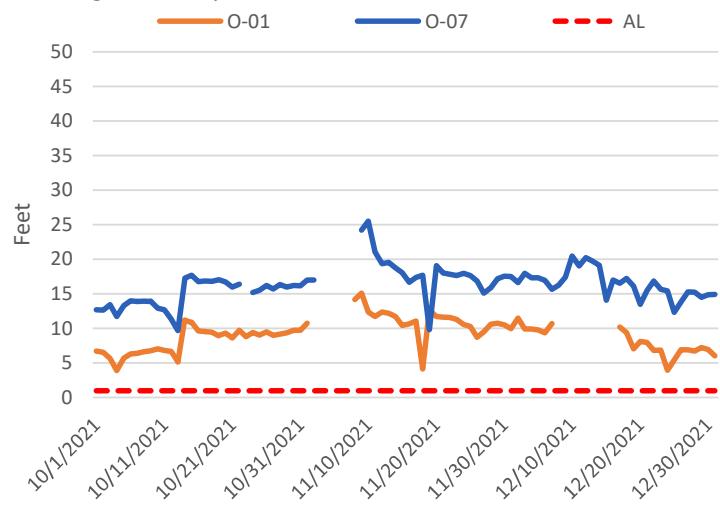


Figure 1j. Hydraulic Gradient for Wells Paired with R-02

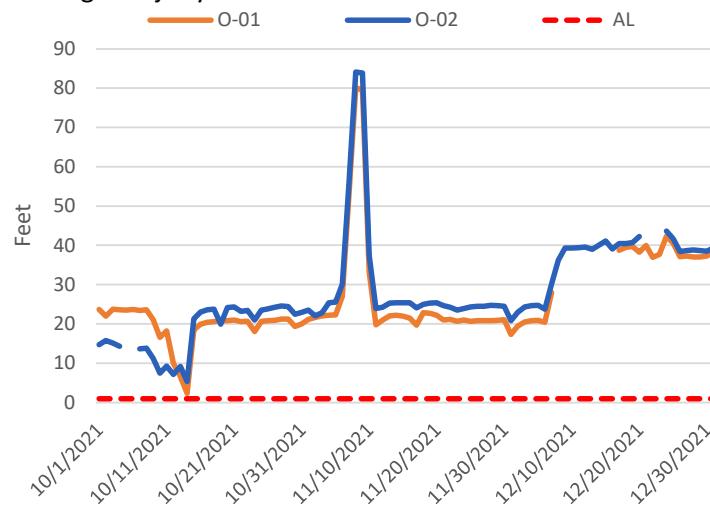


Figure 1k. Hydraulic Gradient for Wells Paired with R-03

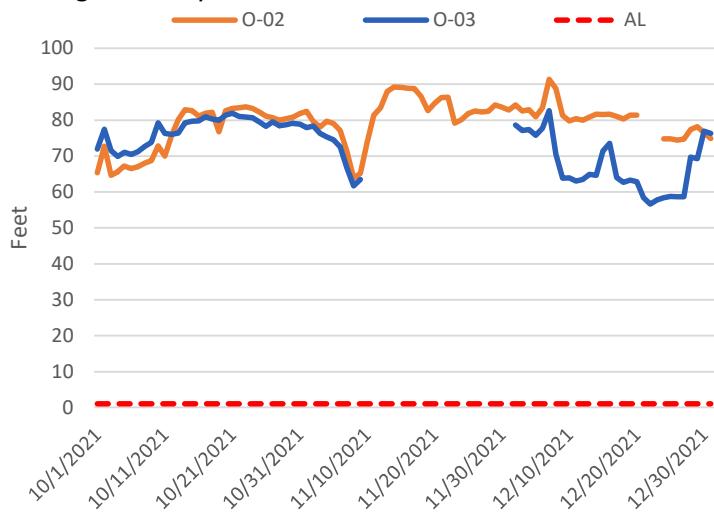
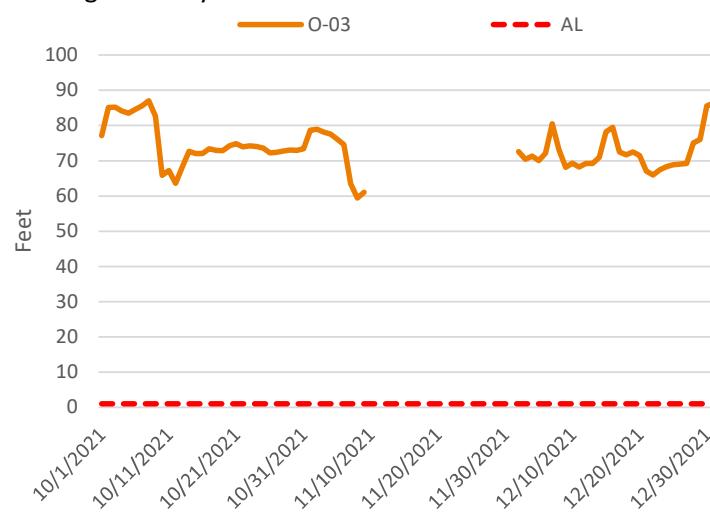


Figure 1l. Hydraulic Gradient for Wells Paired with R-04



Notes:

Refer to preceding Daily Hydraulic Gradient for Recovery Well Pairings Tables (Tables 4 - 6) for details on missing data points.

Hydraulic Gradient - Daily Average Water Level Elevations - Observation and Recovery Wells

Figure 1m. Hydraulic Gradient for Wells Paired with R-05

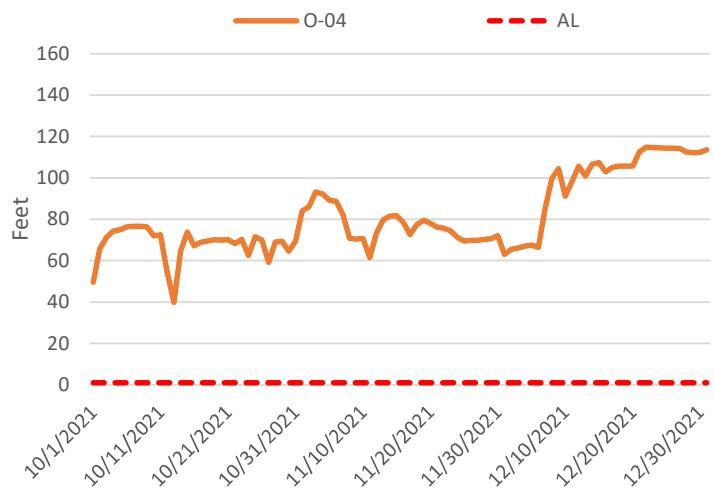


Figure 1n. Hydraulic Gradient for Wells Paired with R-06

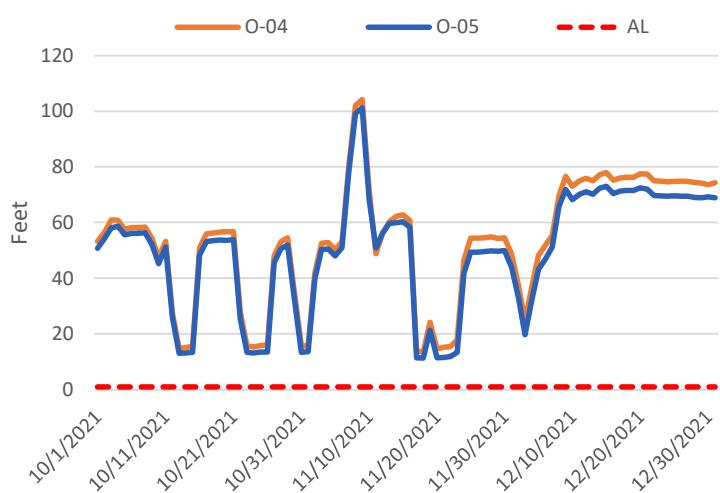


Figure 1o. Hydraulic Gradient for Wells Paired with R-07

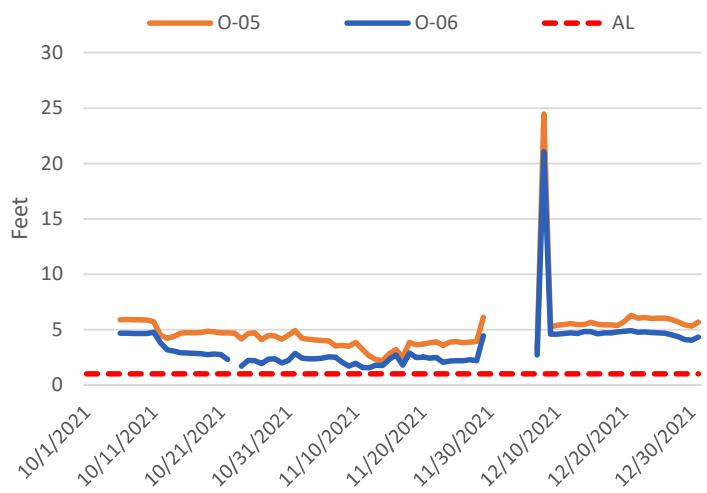
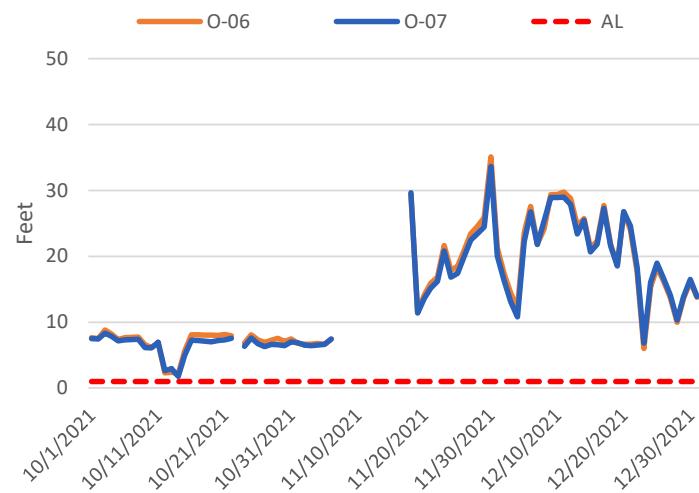


Figure 1p. Hydraulic Gradient for Wells Paired with R-08

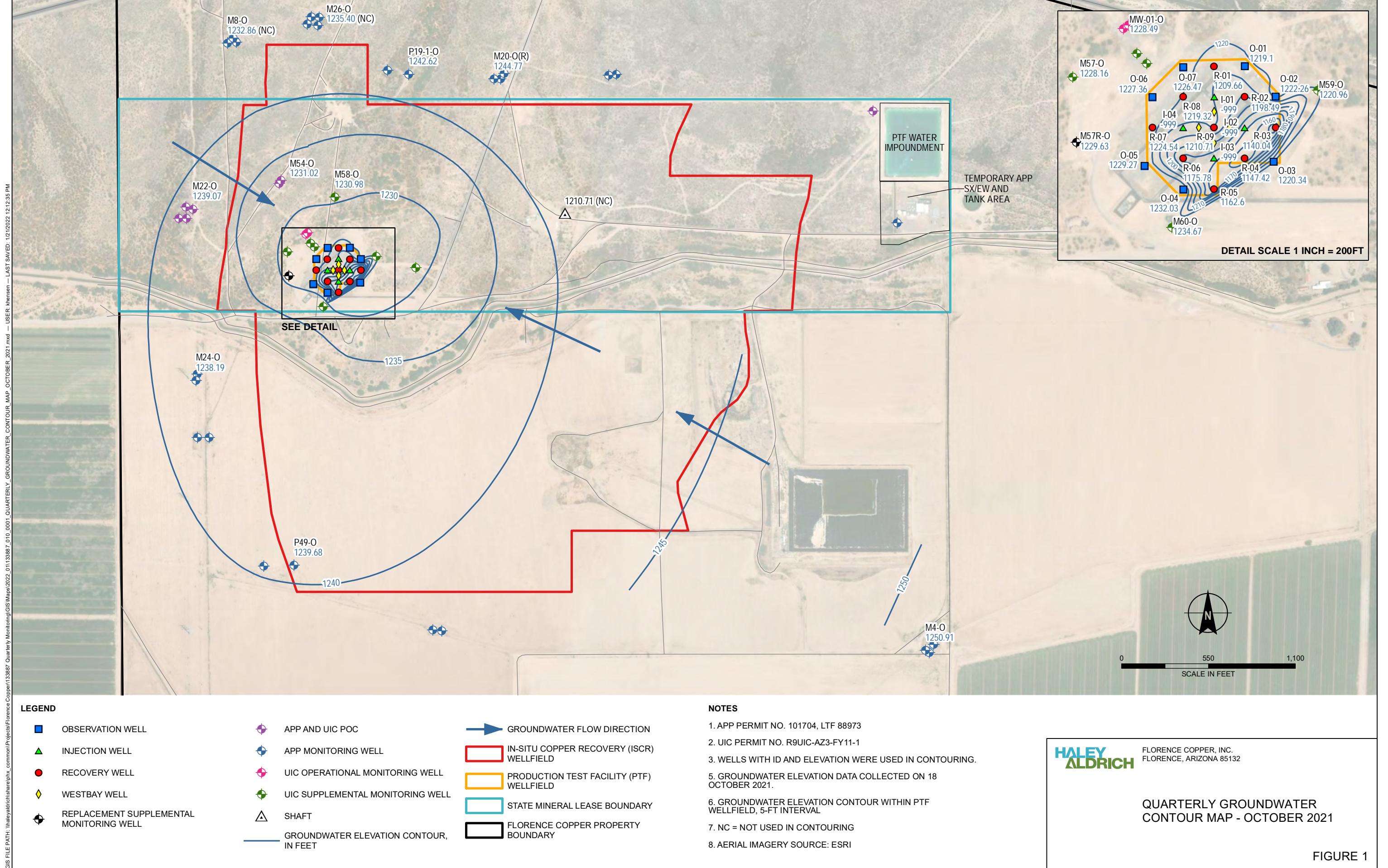


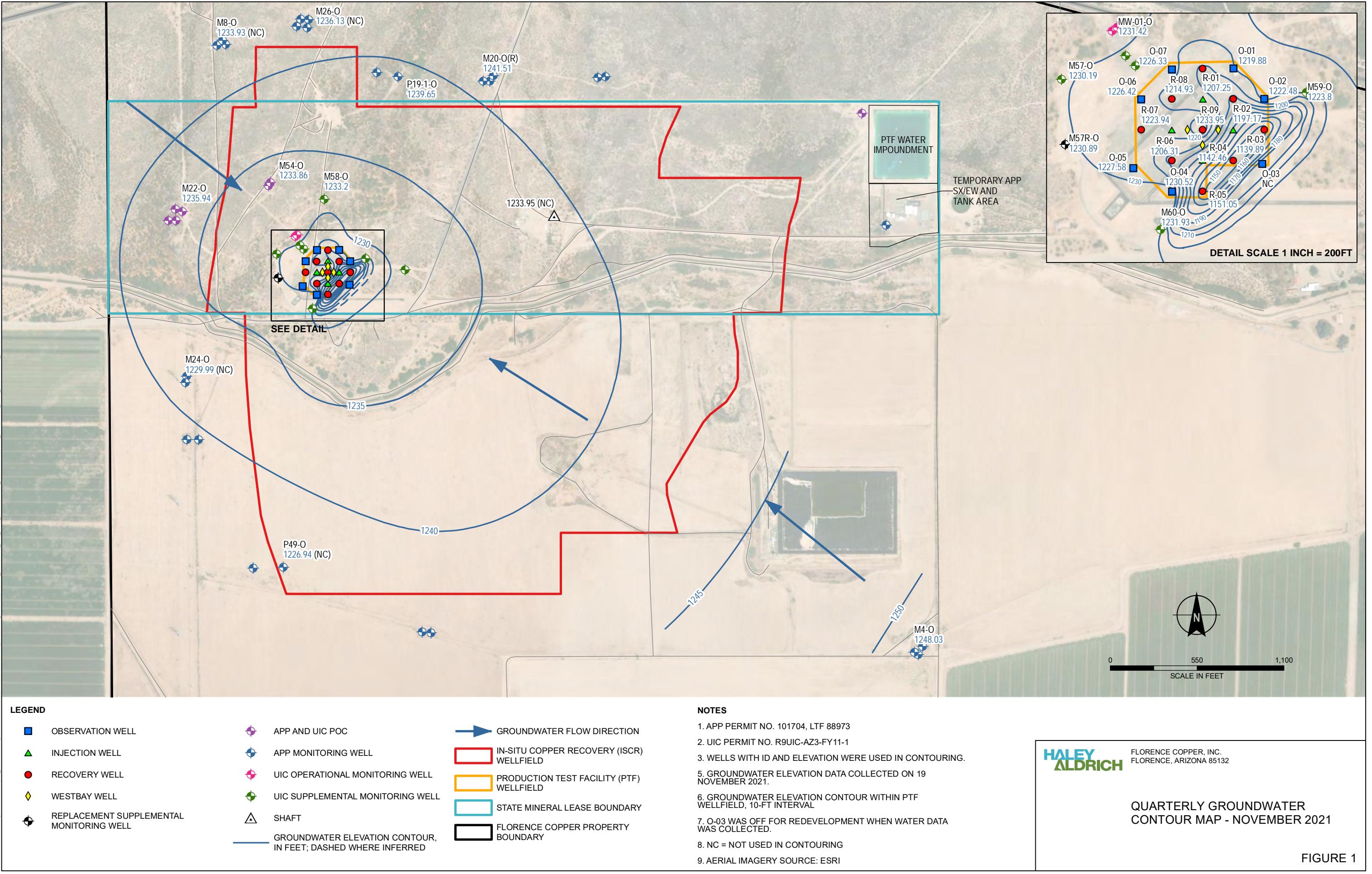
Notes:

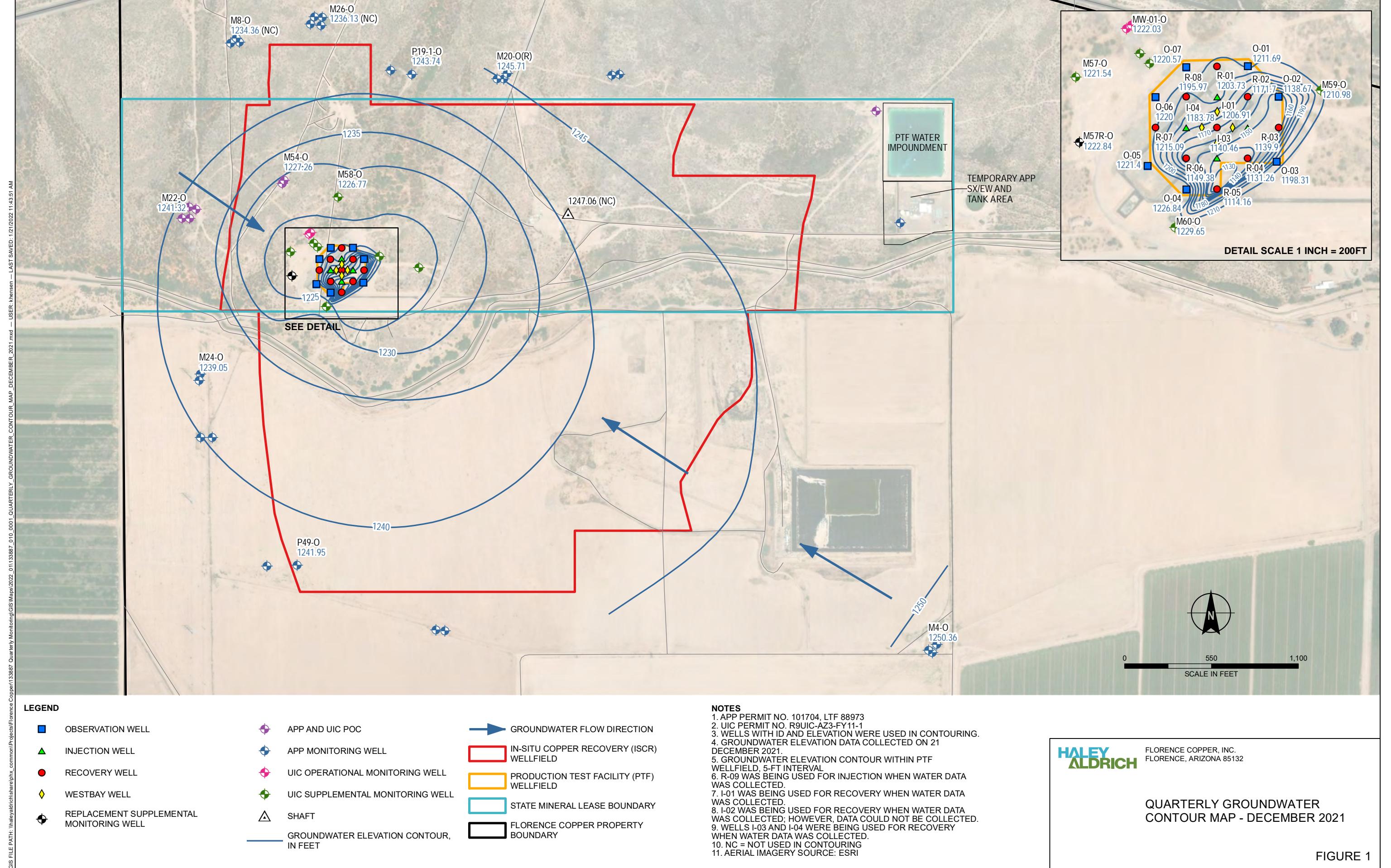
Refer to preceding Daily Hydraulic Gradient for Recovery Well Pairings Tables (Tables 4 - 6) for details on missing data points.

ATTACHMENT 3

Monthly Potentiometric Surface Maps







ATTACHMENT 4

Well Bore Annular Conductivity Device Readings



ANNULAR CONDUCTIVITY DATA QA PROCEDURE & DOCUMENTATION FORM (V.1)

GENERAL

HGI Project Name: 2018-030 - FCP Bulk & Annular Conductivity Monitoring	Project Site: Florence Copper Project	Weather Conditions: 86 Cloudy
Date 10-06-2021	Field Operator Name: C. BALDYLA	Start and End Time: 1752 - 2321

EQUIPMENT

AGI MiniSting (MS) Serial #: S0608049	HGI Cray Interface Panel SN# CR-ES-002	DIAGNOSTICS		MEASUREMENT SETTINGS	
		(See back of sheet for detailed instructions and procedures)			
6Ω Resistor Standard	Result: 6.375	Pass Criteria: $6.25\Omega \pm 0.30$	Circle One: Pass or Fail	• No. Cycles: 4	Off

DATA COLLECTION:

WELL ID	Time (24h)	Current (1 mA)	1			2			3			Data Acceptance Pass = P, Fail = F
			Reading	Resistance ($\Delta V = \Omega$)	Error ($\sigma = \%$)	Reading	Resistance ($\Delta V = \Omega$)	Error ($\sigma = \%$)	Reading	Resistance ($\Delta V = \Omega$)	Error ($\sigma = \%$)	
WB-04	1800	20	272	60.97	1.4	273	60.45	2.5	274	60.25	2.2	P
WB-03	1806	20	275	77.61	0.7	276	75.77	1.2	277	75.11	1.4	P
WB-02	1809	20	278	79.84	2.3	279	80.45	2.5	280	80.49	2.6	P
WB-01	1814	20	281	52.76	1.4	282	50.94	0.8	283	50.06	0.9	P
B-01	1816	20	284	72.72	0.5	285	71.83	0.8	286	71.57	0.9	P
B-07	1821	20	287	61.37	0.4	288	60.68	0.8	289	60.48	0.9	P
B-06	1825	20	290	57.76	1.2	291	55.76	1.0	292	55.04	1.2	P
B-05	1829	20	293	89.85	0.3	294	88.98	0.5	295	86.43	0.7	P
B-04	1911	20	297	52.77	0.9	298	51.42	0.7	299	50.84	0.9	P
B-03	1919	20	300	58.63	1.3	301	56.87	0.4	302	56.12	0.5	P
B-02	2320	20	303	63.19	1.7	304	63.45	1.9	305	63.34	1.7	P

Well ID's that begin with a "B" correspond to the wells that begin with an "O" in standard reporting. For example, B-01 corresponds to O-01.

DATA QUALITY ACCEPTANCE			FIELD OBSERVATIONS		
Measurement Error Evaluation Pass Criteria: 66% (2/3) of measurement error values less than 5%			<small>(Briefly describe site activities at time of data acquisition, status of electrode arrays, or other parameters that may influence readings.)</small> DELETE 296 + 297 BATTERY DIED 2X		
SIGNATURES					
<small>(I certify I carefully checked all components and connections - with all required tools and rigs - and recorded all pertinent information in the field notebook. I also checked all equipment and instruments prior to starting work.)</small> Ch. Bl 10/6/2021 Field Operator Signature/Date			<small>(I certify I carefully checked all components and connections - with all required tools and rigs - and recorded all pertinent information in the field notebook. I also checked all equipment and instruments prior to starting work.)</small> Ch. Bl 10/6/2021 Data Inspector Signature/Date		

ATTACHMENT 5

Summary of Pressure Transducer and Fracture Gradient Readings

Q4 2021 DAILY WELLHEAD PRESSURES - INJECTION WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Page 1 of 3

Table 1. October 2021 Wellhead Pressures

Date	I-01			I-02			I-03			I-04			Fracture Gradient
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	
10/1/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/2/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/3/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/4/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/5/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.00	0.03	112.89
10/6/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/7/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
10/8/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/9/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/10/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/11/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
10/12/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/13/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/14/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.00	0.03	112.89
10/15/2021	0.00	0.00	0.00	NM	NM	NM	0.03	0.00	0.04	0.03	0.01	0.03	112.89
10/16/2021	0.00	0.00	0.00	NM	NM	NM	0.03	0.03	0.03	0.03	0.03	0.03	112.89
10/17/2021	0.00	0.00	0.00	NM	NM	NM	0.02	0.00	0.03	0.03	0.01	0.03	112.89
10/18/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
10/19/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/20/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/21/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
10/22/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.03	0.01	0.03	112.89
10/23/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/24/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/25/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/26/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/27/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.03	0.01	0.03	112.89
10/28/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.03	0.01	0.03	112.89
10/29/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.03	0.01	0.03	112.89
10/30/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.01	0.03	0.01	0.03	112.89
10/31/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	112.89

Notes:

All measurements is pounds per square inch (psi)

NM = Not measured or otherwise not available

I-02 operated as Recovery Well 10/1 - 10/10/2021, then was inactive through 10/31/2021

Calculation of Pressure Allowed at the Wellhead from the Allowed Fracture Gradient

P-Wellhead = P-TOS - P-Col = (P-Frac x D-TOS) - [D-TOS / Conv] Where:

P-Fracture	= Pressure allowed at the top of the injection well screen (TOS)	=	0.65	psi/foot of depth
D-TOS	= Depth to top of injection well screens	=	520	feet
P-TOS	= Total pressure allowed at top of screen = P-Fracture x D-TOS	= 0.65 psi/foot x 520 feet	338	psi
Conv	= Feet of Water per psi	=	2.31	feet/psi
P-Col	= Pressure from weight of water column at TOS	= 520 feet / 2.31 feet/psi	225.11	psi
P-Wellhead	= Allowable pressure at the top of the wellhead = P-TOS - P-Col	= 338 psi - 255.1 psi	112.89	psi

Q4 2021 DAILY WELLHEAD PRESSURES - INJECTION WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Page 2 of 3

Table 2. November 2021 Wellhead Pressures

Date	I-01			I-02			I-03			I-04			Fracture Gradient
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	
11/1/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/2/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.03	0.03	0.01	0.03	112.89
11/3/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/4/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/5/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/6/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/7/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/8/2021	0.00	0.00	0.00	NM	NM	NM	0.01	0.00	1.34	0.03	0.01	0.03	112.89
11/9/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/10/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/11/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/12/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/13/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.00	0.03	112.89
11/14/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/15/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/16/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/17/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.00	0.03	112.89
11/18/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
11/19/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/20/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
11/21/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
11/22/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
11/23/2021	0.00	0.00	0.00	NM	NM	NM	0.02	0.00	2.59	0.03	0.03	0.03	112.89
11/24/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/25/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.03	0.03	112.89
11/26/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/27/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/28/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/29/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89
11/30/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	112.89

Notes:

All measurements is pounds per square inch (psi)

NM = Not measured or otherwise not available

I-02 was not in operation 11/1/2021 - 11/30/2021

Calculation of Pressure Allowed at the Wellhead from the Allowed Fracture Gradient

$$P\text{-Wellhead} = P\text{-TOS} - P\text{-Col} = [P\text{-Frac} \times D\text{-TOS}] - [D\text{-TOS} / Conv] \text{ Where:}$$

P-Fracture	= Pressure allowed at the top of the injection well screen (TOS)	=	0.65	psi/foot of depth
D-TOS	= Depth to top of injection well screens	=	520	feet
P-TOS	= Total pressure allowed at top of screen = P-Fracture x D-TOS	=	338	psi
Conv	= Feet of Water per psi	=	2.31	feet/psi
P-Col	= Pressure from weight of water column at TOS	=	225.11	psi
P-Wellhead	= Allowable pressure at the top of the wellhead = P-TOS - P-Col	=	112.89	psi

Q4 2021 DAILY WELLHEAD PRESSURES - INJECTION WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Page 3 of 3

Table 3. December 2021 Wellhead Pressures

Date	I-01			I-02			I-03			I-04			R-09				Fracture Gradient
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max		
12/1/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	NM	NM	NM	112.89	
12/2/2021	0.06	0.00	0.08	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	NM	NM	NM	112.89	
12/3/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89	
12/4/2021	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89	
12/5/2021	0.00	0.00	0.00	NM	NM	NM	0.01	0.00	0.03	0.00	0.00	0.00	NM	NM	NM	112.89	
12/6/2021	0.06	0.00	0.09	NM	NM	NM	0.01	0.00	0.03	0.03	0.01	0.03	NM	NM	NM	112.89	
12/7/2021	0.07	0.03	0.06	NM	NM	NM	0.00	0.00	0.00	0.03	0.01	0.03	NM	NM	NM	112.89	
12/8/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	6.16	0.09	18.94	112.89	
12/9/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	12.23	3.46	21.57	112.89	
12/10/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	19.19	9.33	30.85	112.89	
12/11/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	12.66	5.07	24.93	112.89	
12/12/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	14.60	12.18	21.22	112.89	
12/13/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	15.28	13.84	16.11	112.89	
12/14/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20.76	14.83	30.14	112.89	
12/15/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	26.22	14.99	37.78	112.89	
12/16/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20.21	0.00	28.39	112.89	
12/17/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	23.40	18.98	31.00	112.89	
12/18/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	19.67	17.83	22.38	112.89	
12/19/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	19.02	11.77	20.61	112.89	
12/20/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	16.16	2.67	26.01	112.89	
12/21/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	11.41	2.48	14.05	112.89	
12/22/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	12.38	10.88	13.70	112.89	
12/23/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	10.67	10.14	12.04	112.89	
12/24/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	11.16	10.14	12.50	112.89	
12/25/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	13.65	10.16	16.65	112.89	
12/26/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	13.93	9.21	19.09	112.89	
12/27/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	14.08	7.91	22.20	112.89	
12/28/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	27.98	21.64	34.14	112.89	
12/29/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	33.58	30.64	34.48	112.89	
12/30/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	29.93	22.75	32.25	112.89	
12/31/2021	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	21.34	6.72	24.1	112.89	

Notes:

All measurements is pounds per square inch (psi)

NM = Not measured or otherwise not available

I-02 was not in operation 12/1/2021 - 12/8/2021

I-02 and I-03 converted to recovery wells on 12/8/2021

I-01 and I-04 are converted to recovery wells on 12/8/2021 but are not operated until 12/20/2021

Recovery well R-09 converted to injection well on 12/8/2021.

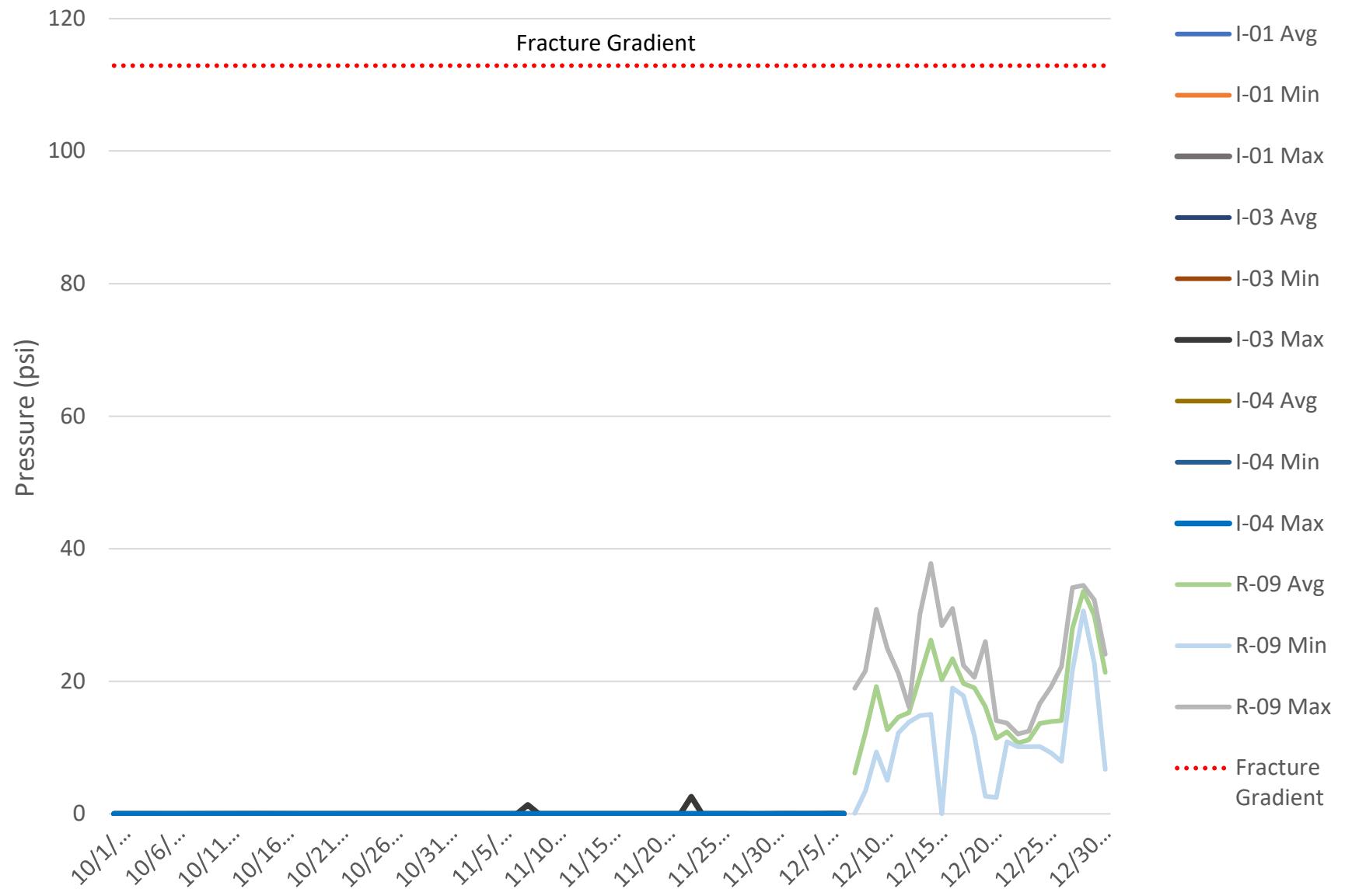
I-01 and I-04 begin operation as recovery wells on 12/20/2021

Calculation of Pressure Allowed at the Wellhead from the Allowed Fracture Gradient

$$P\text{-Wellhead} = P\text{-TOS} - P\text{-Col} = [P\text{-Frac} \times D\text{-TOS}] - [D\text{-TOS} / Conv]$$

Where:
 $P\text{-Frac}$ = Pressure allowed at the top of the injection well screen (TOS) = 0.65 psi/foot of depth
 $D\text{-TOS}$ = Depth to top of injection well screens = 520 feet
 $Conv$ = Feet of Water per psi = 2.31 feet/psi
 $P\text{-Col}$ = Pressure from weight of water column at TOS = 520 feet / 2.31 feet/psi = 225.11 psi
 $P\text{-Wellhead}$ = Allowable pressure at the top of the wellhead = P-TOS - P-Col = 338 psi - 225.11 psi = 112.89 psi

Figure 1. Daily Wellhead Pressures - Injection Wells



Q4 2021 - DAILY CASING ANNULUS PRESSURES - INJECTION WELLS

FLORENCE COPEPR INC.

FLORENCE, ARIZONA

Page 1 of 3

Table 4. October 2021 Casing Annulus Pressure

Date	I-01			I-02			I-03			I-04			Fracture Gradient
	Avg	Min	Max										
10/1/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/2/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/3/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/4/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/5/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/6/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/7/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/8/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/9/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/10/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/11/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/12/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/13/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/14/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/15/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/16/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/17/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/18/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/19/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/20/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/21/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/22/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/23/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/24/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/25/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/26/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/27/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/28/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/29/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/30/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
10/31/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89

Notes:

All measurements in pounds per square inch (psi)

Q4 2021 - DAILY CASING ANNULUS PRESSURES - INJECTION WELLS

FLORENCE COPEPR INC.

FLORENCE, ARIZONA

Page 2 of 3

Table 5. November 2021 Casing Annulus Pressure

Date	I-01			I-02			I-03			I-04			Fracture Gradient
	Avg	Min	Max										
11/1/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/2/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/3/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/4/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/5/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/6/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/7/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/8/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/9/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/10/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/11/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/12/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/13/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/14/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/15/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/16/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/17/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/18/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/19/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/20/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/21/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/22/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/23/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/24/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/25/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/26/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/27/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/28/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/29/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89
11/30/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.89

Notes:

All measurements in pounds per square inch (psi)

Q4 2021 - DAILY CASING ANNULUS PRESSURES - INJECTION WELLS

FLORENCE COPEPR INC.

FLORENCE, ARIZONA

Page 3 of 3

Table 6. December 2021 Casing Annulus Pressure

Date	I-01			I-02			I-03			I-04			R-09			Fracture Gradient
	Avg	Min	Max													
12/1/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/2/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/3/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/4/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/5/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/6/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/7/2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	NM	NM	112.89
12/8/2021	NM	0.00	0.00	0.00	112.89											
12/9/2021	NM	0.00	0.00	0.00	112.89											
12/10/2021	NM	0.00	0.00	0.00	112.89											
12/11/2021	NM	0.00	0.00	0.00	112.89											
12/12/2021	NM	0.00	0.00	0.00	112.89											
12/13/2021	NM	0.00	0.00	0.00	112.89											
12/14/2021	NM	0.00	0.00	0.00	112.89											
12/15/2021	NM	0.00	0.00	0.00	112.89											
12/16/2021	NM	0.00	0.00	0.00	112.89											
12/17/2021	NM	0.00	0.00	0.00	112.89											
12/18/2021	NM	0.00	0.00	0.00	112.89											
12/19/2021	NM	0.00	0.00	0.00	112.89											
12/20/2021	NM	0.00	0.00	0.00	112.89											
12/21/2021	NM	0.00	0.00	0.00	112.89											
12/22/2021	NM	0.00	0.00	0.00	112.89											
12/23/2021	NM	0.00	0.00	0.00	112.89											
12/24/2021	NM	0.00	0.00	0.00	112.89											
12/25/2021	NM	0.00	0.00	0.00	112.89											
12/26/2021	NM	0.00	0.00	0.00	112.89											
12/27/2021	NM	0.00	0.00	0.00	112.89											
12/28/2021	NM	0.00	0.00	0.00	112.89											
12/29/2021	NM	0.00	0.00	0.00	112.89											
12/30/2021	NM	0.00	0.00	0.00	112.89											
12/31/2021	NM	0.00	0.00	0.00	112.89											

Notes:

All measurements in pounds per square inch (psi)

NM = Not measured or otherwise not available

I-02 was not in operation 12/1/2021 - 12/8/2021

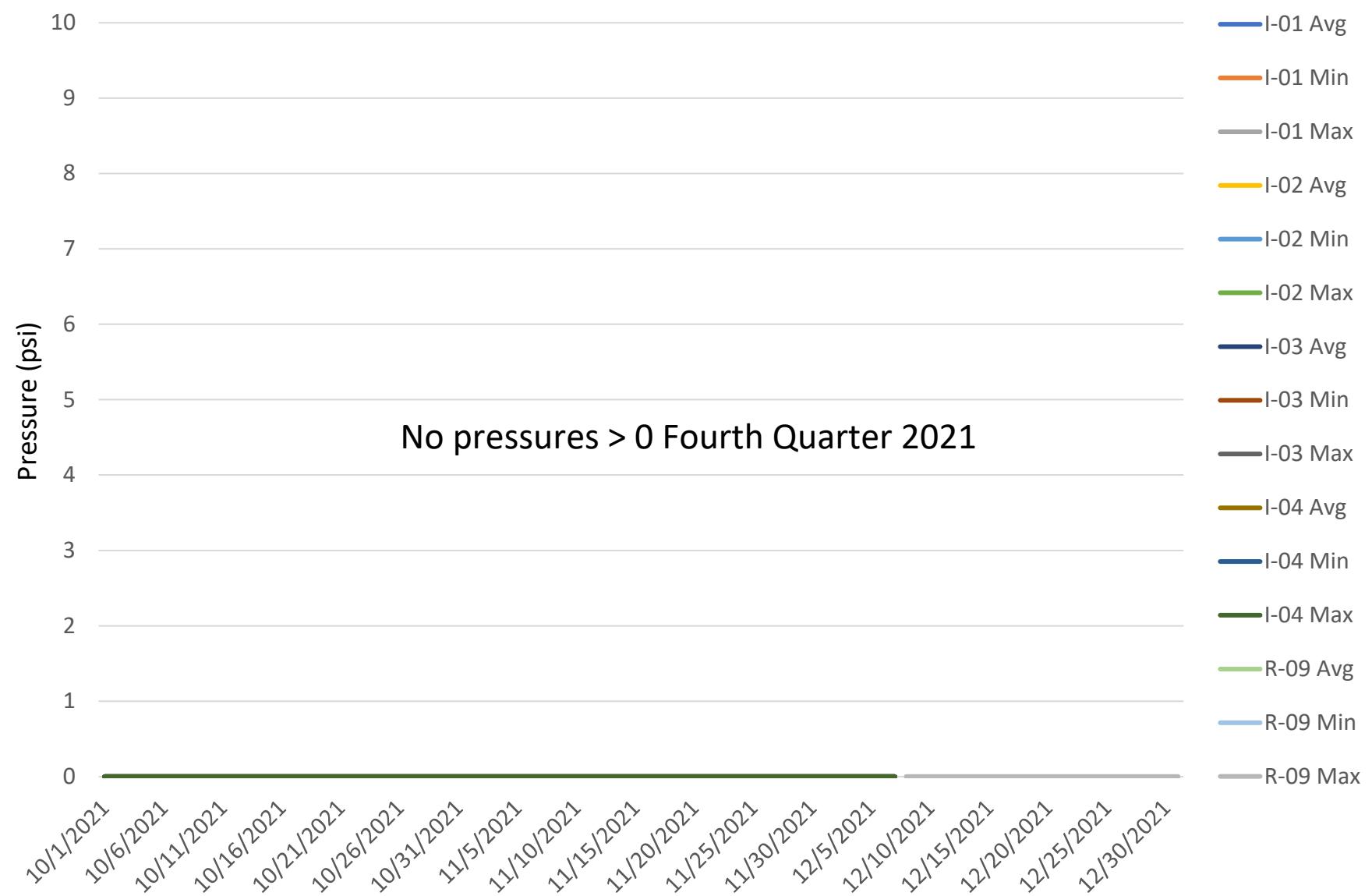
I-02 and I-03 converted to recovery wells on 12/8/2021

I-01 and I-04 are converted to recovery wells on 12/8/2021 but are not operated until 12/20/2021

Recovery well R-09 converted to injection well on 12/8/2021.

I-01 and I-04 begin operation as recovery wells on 12/20/2021

Figure 2. Daily Casing Annulus Pressures - Injection Wells



ATTACHMENT 6

Graphical Representation of Fluid Electrical Conductivity Readings from Injection and Observation Wells

Q4 2021 DAILY FLUID ELECTRICAL CONDUCTIVITY

Page 1 of 3

INJECTION AND OBSERVATION WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 1. October 2021 Daily Fluid Electrical Conductivity - Injection and Observation Wells

Date	I-01	I-02 ¹	I-03	I-04	O-01	O-02	O-03	O-04	O-05	O-06	O-07
10/1/2021	638	4356	729	NA	NA	3459	3435	1550	2082	1553	1533
10/2/2021	899	4355	870	617	5487	3695	4188	1592	2101	1591	1539
10/3/2021	2355	1940	830	720	5550	3356	4182	1568	2115	1614	1566
10/4/2021	5207	584	523	2636	5350	3326	4310	1537	2029	1536	1512
10/5/2021	536	4456	NA	543	5330	3381	3606	1529	1988	1516	1499
10/6/2021	536	4456	NA	543	NA						
10/7/2021	451	5345	NA	491	5857	3621	4260	1676	2171	1704	1670
10/8/2021	480	4923	NA	477	NA	3340	4541	1576	2007	1628	1602
10/9/2021	4531	5012	NA	4302	5354	3327	3816	1535	1957	1549	1547
10/10/2021	456	4913	NA	456	NA	3488	4805	1540	1951	1536	1510
10/11/2021	615	NA	NA	688	5645	3340	3372	1518	2003	1552	1525
10/12/2021	3703	NA	NA	3718	5510	3488	4473	1542	1983	1569	1566
10/13/2021	1725	NA	NA	NA	5242	NA	4655	1507	NA	1543	1519
10/14/2021	NA	NA	NA	NA	5385	3350	4586	1497	1922	1573	1520
10/15/2021	NA	NA	NA	NA	NA	NA	4735	1532	1973	1733	1661
10/16/2021	NA	NA	692	690	5221	3114	1888	1496	1873	1537	1505
10/17/2021	NA	NA	785	429	5261	3207	4910	1517	2011	NA	1557
10/18/2021	NA	NA	419	401	4829	2309	4743	1490	1922	1485	1467
10/19/2021	NA	NA	487	427	5430	2415	4216	1623	2114	1655	1624
10/20/2021	NA	NA	457	429	5479	2516	5055	1645	2115	1648	1647
10/21/2021	NA	NA	611	574	5787	2662	5225	1635	2078	1680	1642
10/22/2021	NA	NA	NA	NA	5724	2652	5274	1655	2122	1668	NA
10/23/2021	NA	NA	NA	NA	5759	2627	5177	1663	2084	NA	NA
10/24/2021	NA	NA	NA	NA	5699	2734	5365	1641	2075	NA	NA
10/25/2021	NA	NA	NA	NA	5750	2630	5369	1594	2019	1639	1609
10/26/2021	NA	NA	NA	NA	5344	2808	5262	1518	1951	1545	1586
10/27/2021	NA	NA	NA	NA	5273	NA	3817	1509	1851	1523	1501
10/28/2021	NA	NA	1075	425	5029	NA	5032	1510	1856	1550	1523
10/29/2021	NA	NA	594	NA	5100	NA	5144	1515	1908	1560	1520
10/30/2021	NA	NA	NA	NA	4857	NA	5139	1515	1881	1526	1518
10/31/2021	NA	NA	NA	NA	5061	NA	4654	1586	2096	1548	1634

Notes:

 All measurements in microsiemens per centimeter ($\mu\text{S}/\text{cm}$)

#N/A or NM = Not measured or otherwise not available

(1) 10/1 - 10/11/2021 I-02 was operated as a recovery well

No data were available for the following dates/wells:

Injection flows were adjusted as part of rinsing program in October, with selected wells operated on different days as part of the wellfield rinsing plan.

10/1/2021 O-01 pump replacement

10/6/2021 No observation well conductivity field sheet submitted

10/8 & 10/10/2021 O-01 pump malfunction

10/13/2021 O-02, O-05 pump malfunction

10/14 - 10/15/2021 All injection suspended for reverse osmosis system maintenance

10/15/2021 O-01 field measurement error

10/15/2021 O-02 pump malfunction

10/17/2021 O-06 Field measurement error

10/22 - 10/24/2021 O-06 and O-07 pump and transducer pulled for logging test

10/23 - 10/25/2021 All injection suspended for reverse osmosis system maintenance

10/27 - 11/8/2021 O-02 redevelopment

INJECTION AND OBSERVATION WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 2. November 2021 Daily Fluid Electrical Conductivity - Injection and Observation Wells

Date	I-01	I-02	I-03	I-04	O-01	O-02	O-03	O-04	O-05	O-06	O-07
11/1/2021	NA	NA	NA	NA	4898	NA	4823	1521	1834	1565	1532
11/2/2021	NA	NA	561	497	5593	NA	4977	1650	1817	1542	1605
11/3/2021	NA	NA	518	497	5072	NA	3072	1448	1853	1495	1411
11/4/2021	NA	NA	1237	432	5263	NA	4636	1478	1838	1507	1405
11/5/2021	NA	NA	544	476	4873	NA	4846	1459	1779	1475	1460
11/6/2021	NA	NA	620	507	4873	NA	4677	1461	1769	1480	1480
11/7/2021	NA	NA	747	646	4870	NA	4638	1483	1789	1498	1495
11/8/2021	NA	NA	587	472	5221	2258	4797	NA	1870	1541	1532
11/9/2021	NA	NA	660	640	4688	2319	2082	NA	1843	1561	1552
11/10/2021	NA	NA	664	637	4669	2111	NA	NA	1794	1493	1476
11/11/2021	NA	NA	457	425	5063	2318	NA	NA	1861	1548	1538
11/12/2021	NA	NA	567	554	4896	2215	NA	1582	1824	1553	1543
11/13/2021	NA	NA	388	395	5017	2930	NA	NA	1913	1547	1520
11/14/2021	NA	NA	485	465	5712	2318	NA	NA	1851	1469	1572
11/15/2021	NA	NA	456	450	5296	2132	NA	NA	1886	1494	1433
11/16/2021	NA	NA	481	487	5364	2375	NA	NA	1948	1598	1565
11/17/2021	NA	NA	419	433	5430	1952	NA	NA	1989	1611	1570
11/18/2021	NA	NA	545	480	4326	1957	NA	NA	1640	1458	1422
11/19/2021	NA	NA	442	399	5420	2328	NA	NA	1870	1607	1645
11/20/2021	NA	NA	1224	397	4994	2168	NA	1525	1763	1559	1538
11/21/2021	NA	NA	478	426	4937	2173	NA	1528	1751	1551	1513
11/22/2021	NA	NA	478	426	5454	2428	NA	1664	1921	1669	1647
11/23/2021	NA	NA	596	513	5172	2196	NA	1557	1813	1594	1573
11/24/2021	NA	NA	746	703	5535	2445	NA	1659	1920	1679	1640
11/25/2021	NA	NA	696	662	5749	2342	NA	NA	1985	1684	1653
11/26/2021	NA	NA	916	901	5811	2220	NA	1547	1944	1570	1560
11/27/2021	NA	NA	510	490	5700	2038	NA	1693	1822	1624	1570
11/28/2021	NA	NA	507	480	5645	2340	NA	1679	1900	1703	1639
11/29/2021	NA	NA	494	487	5051	2238	NA	1596	1846	1677	1663
11/30/2021	NA	NA	596	579	5236	2293	NA	1641	1903	1681	1666

Notes:All measurements in microsiemens per centimeter ($\mu\text{S}/\text{cm}$)

#N/A or NM = Not measured or otherwise not available

11/20/2021 I-03 outlier, possible field recording error

No data were available for the following dates/wells:

No injection at I-01 and I-02 in November as per rinsing plan

11/1/2021 No injection as part of rinsing plan

10/27 - 11/8/2021 O-02 redevelopment

11/8 - 11/11/2021 O-04 redevelopment

11/10 - 12/2/2021 O-03 redevelopment

11/13 - 11/19/2021 O-04 pump maintenance

11/25/2021 O-04 pump maintenance

INJECTION AND OBSERVATION WELLS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 3. December 2021 Daily Fluid Electrical Conductivity - Injection and Observation Wells

Date	I-01	I-02	I-03	I-04	R-09	O-01	O-02	O-03	O-04	O-05	O-06	O-07
12/1/2021	NA	NA	2066	2020	NA	5167	2250	NA	1669	1876	1671	1660
12/2/2021	NA	NA	2407	2302	NA	5133	2304	NA	1648	1850	1663	1642
12/3/2021	NA	NA	NA	NA	NA	5489	2275	3209	1687	1884	1652	1608
12/4/2021	NA	NA	NA	NA	NA	5507	2304	3103	1660	1882	1701	1637
12/5/2021	NA	NA	NA	NA	NA	5007	2162	1656	1434	1712	1552	1513
12/6/2021	NA	NA	NA	NA	NA	4371	1991	1480	1398	1561	1484	1464
12/7/2021	893	NA	NA	744	NA	4823	2112	4610	1730	1930	1619	1640
12/8/2021	526	NA	NA	508	NA	4677	2126	4705	1807	1972	1636	1627
12/9/2021	NA	NA	NA	NA	818	NA	2166	5340	1527	1745	1542	1571
12/10/2021	NA	NA	NA	NA	575	NA	2907	5182	1514	1742	1681	1611
12/11/2021	NA	NA	NA	NA	682	NA	1942	4945	1608	1756	1562	1518
12/12/2021	NA	NA	NA	NA	745	NA	1969	5177	1567	1737	1530	1527
12/13/2021	NA	NA	NA	NA	515	NA	1960	4606	1603	1770	1591	1594
12/14/2021	NA	NA	NA	NA	591	NA	2220	5229	1609	1812	1627	1610
12/15/2021	NA	NA	NA	NA	702	NA	2299	5201	1618	1837	1599	1586
12/16/2021	NA	NA	NA	NA	744	NA	2043	2602	1610	1782	1630	1556
12/17/2021	NA	NA	NA	NA	533	NA	2123	1769	1568	1785	1618	1129
12/18/2021	NA	NA	NA	NA	1143	NA	1680	4925	1612	1795	1635	1572
12/19/2021	NA	NA	NA	NA	514	NA	1802	4662	1454	1625	1504	1500
12/20/2021	NA	NA	NA	NA	1050	NA	NA	5860	1713	1902	1902	1782
12/21/2021	NA	NA	NA	NA	685	4985	NA	5072	1713	1786	1610	1425
12/22/2021	NA	NA	NA	NA	547	4296	NA	4482	1476	1620	1490	1464
12/23/2021	NA	NA	NA	NA	744	4606	1680	4925	1612	1795	1635	1572
12/24/2021	NA	NA	NA	NA	714	5300	1505	1745	1655	1775	1657	1739
12/25/2021	NA	NA	NA	NA	1138	4600	1346	4993	1728	1620	1682	1582
12/26/2021	NA	NA	NA	NA	866	4418	1357	4883	1572	1770	1580	1542
12/27/2021	NA	NA	NA	NA	1342	4190	1316	4512	1486	1605	1496	1509
12/28/2021	NA	NA	NA	NA	834	4170	1362	4580	1511	1626	1520	1497
12/29/2021	NA	NA	NA	NA	1304	4243	1783	NA	1463	1641	1529	1494
12/30/2021	NA	NA	NA	NA	948	4141	1496	NA	1487	1634	1502	1492
12/31/2021	NA	NA	NA	NA	985	4667	1428	4841	1630	1766	1620	1585

Notes:All measurements in microsiemens per centimeter ($\mu\text{S}/\text{cm}$)

#N/A or NM = Not measured or otherwise not available

12/1 - 12/2/2021 I-02 and I-03 outliers, potential field recording issue

No data were available for the following dates/wells:

12/1 - 12/2/2021: Injection at I-03 and I-04 only

12/3 - 12/6/2021: No injection per rinsing plan

12/7 - 12/8/2021: Injection at I-01 and I-04 only

12/8/2021 I-02 and I-03 converted to recovery wells; recovery well R-09 converted to injection well

12/8/2021 I-01 and I-04 are converted to recovery wells but are not operated until 12/20/2021

12/8 - 12/20/2021 O-01 redevelopment

12/20/2021 I-01 and I-04 begin operation as recovery wells

12/20 - 12/22/2021 O-02 redevelopment

12/29 - 12/30/2021 O-03 pump malfunction

Figure 1. Daily Fluid Electrical Conductivity in Injection & Observation Wells

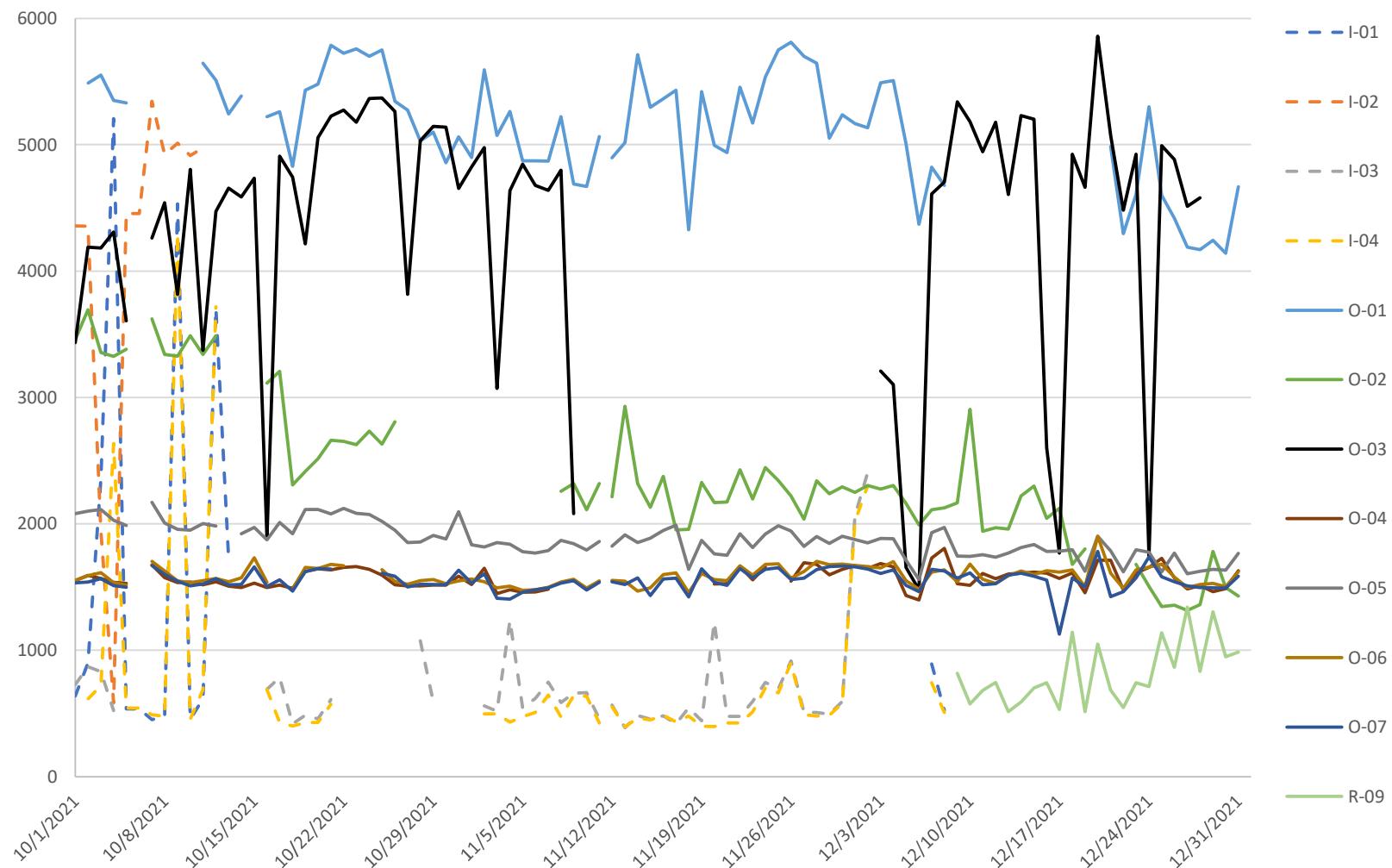
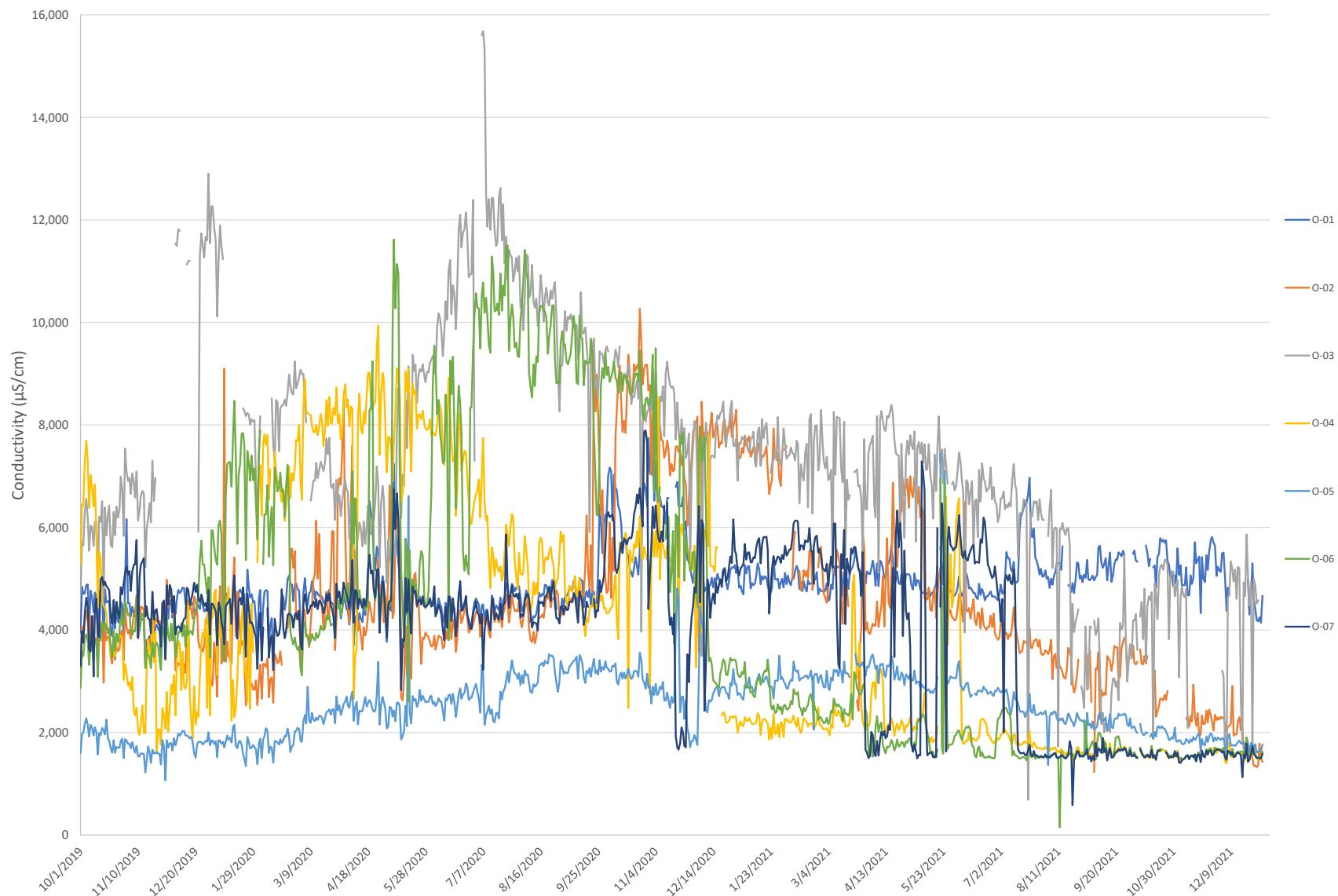


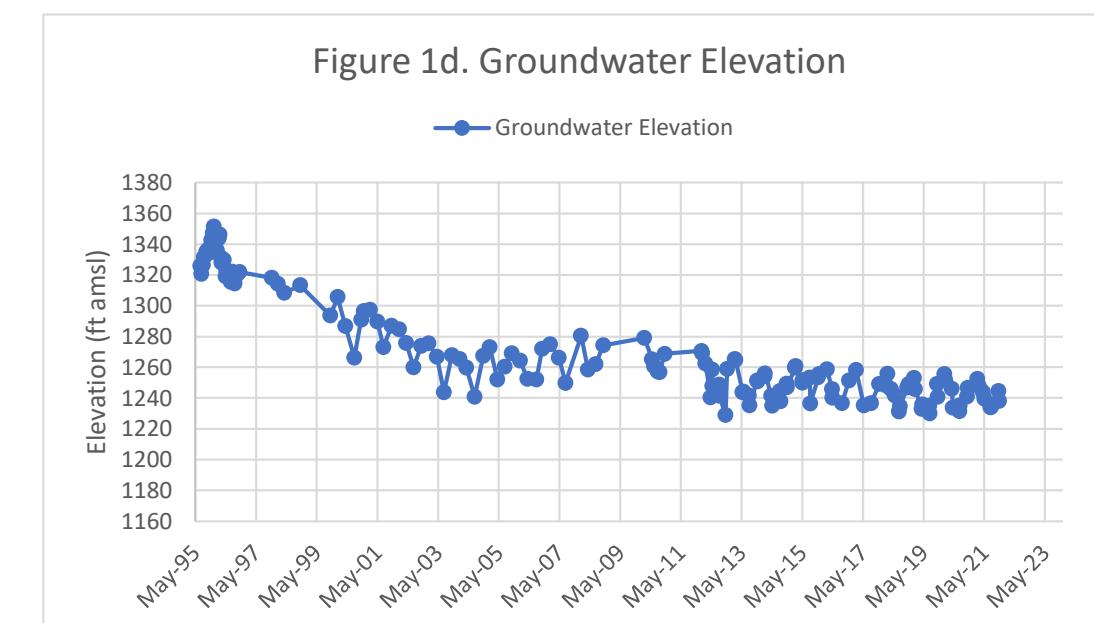
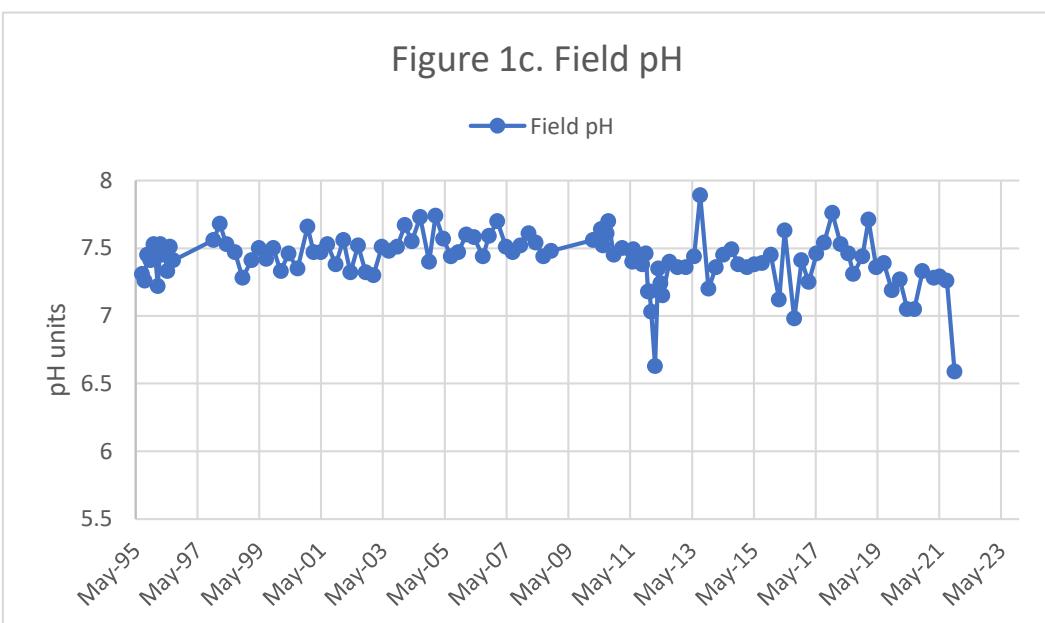
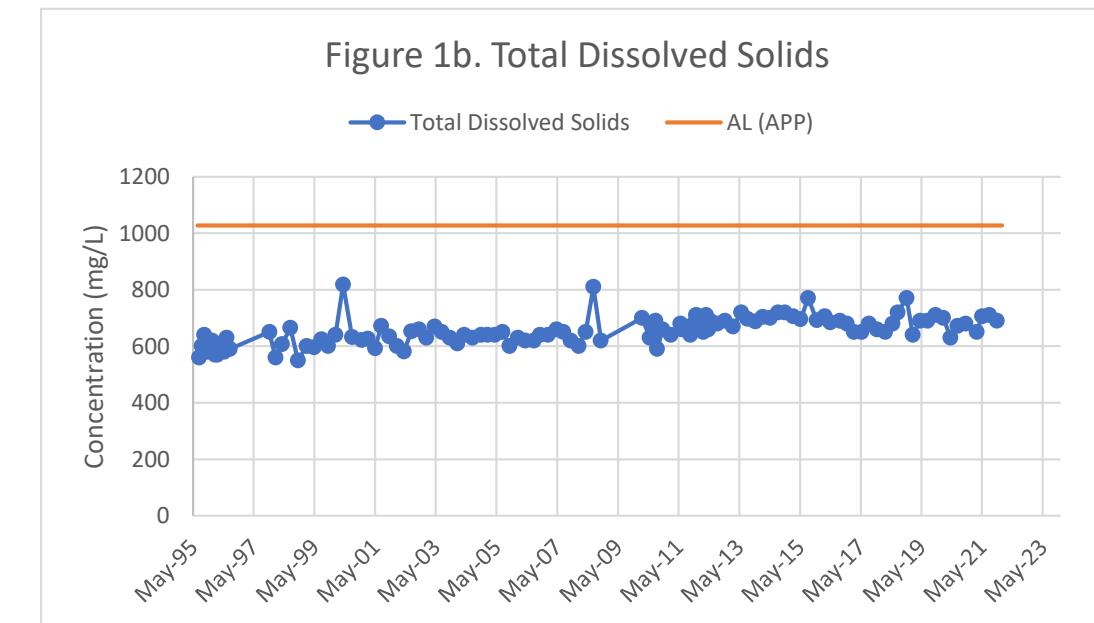
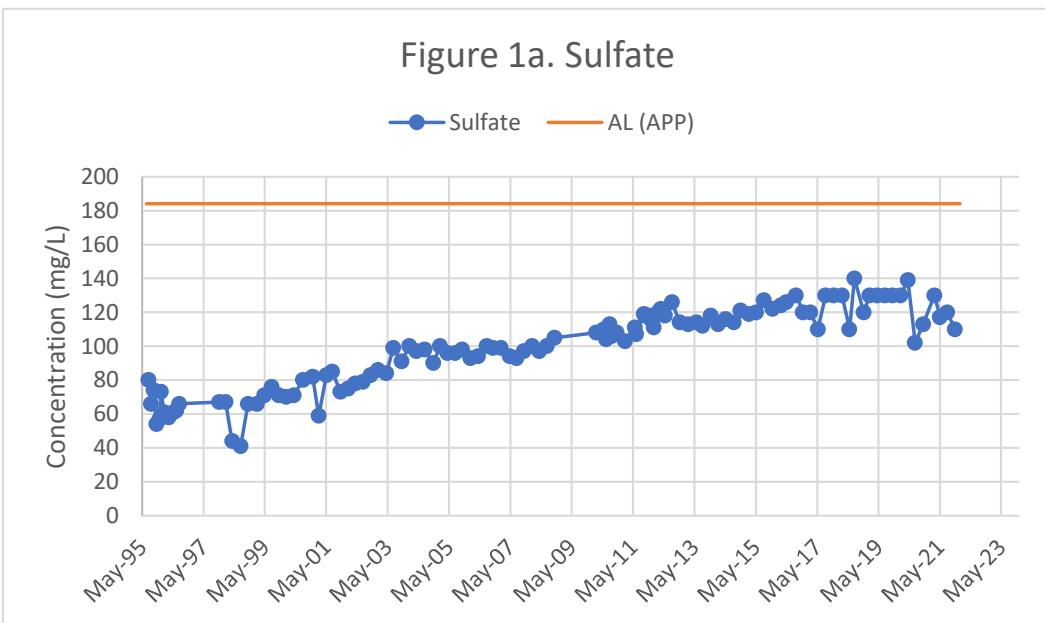
Figure 2. Daily Fluid in Observation Wells Over Past 9 Calendar Quarters



ATTACHMENT 7

Time versus Concentration Plots of Select Groundwater Parameters

M1-GL QUARTERLY CONCENTRATION GRAPHS



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M2-GU QUARTERLY CONCENTRATION GRAPHS

Figure 2a. Sulfate

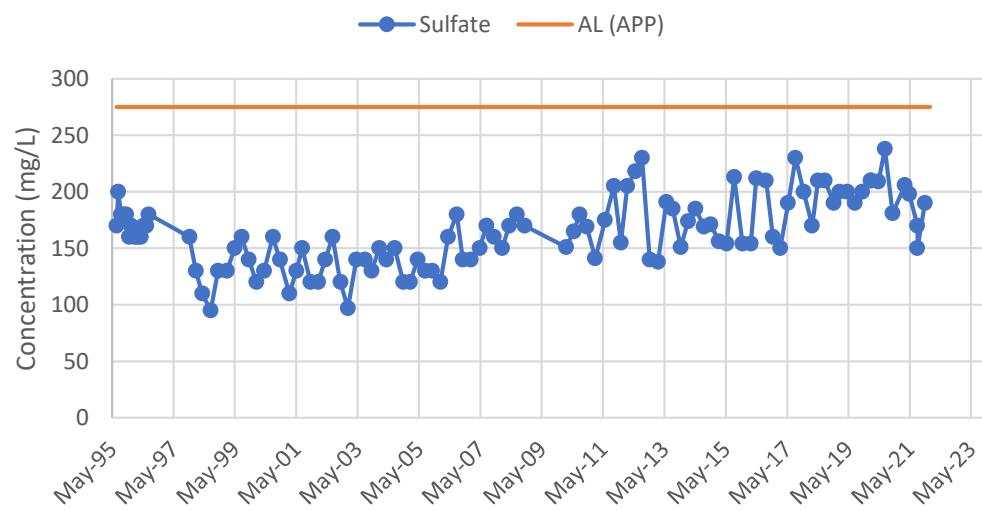


Figure 2b. Total Dissolved Solids

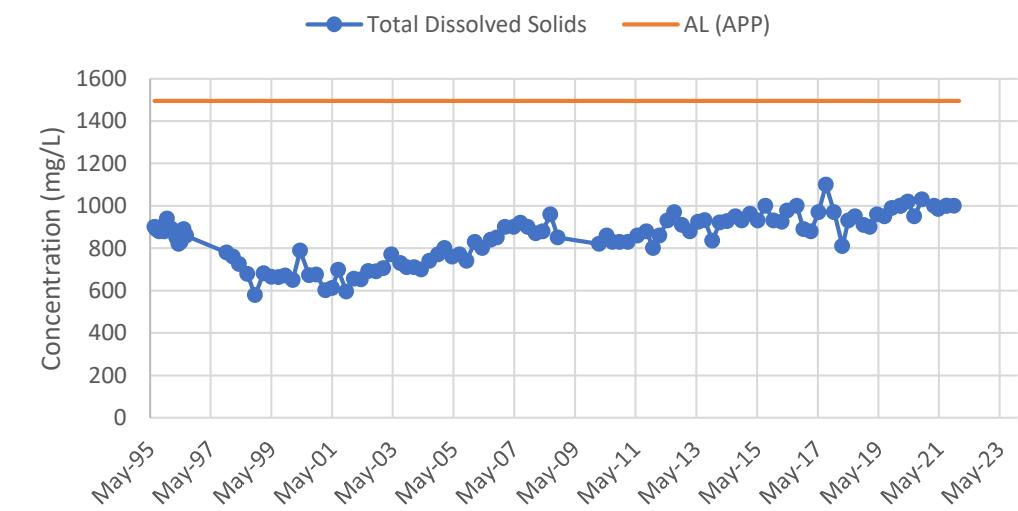


Figure 2c. Field pH

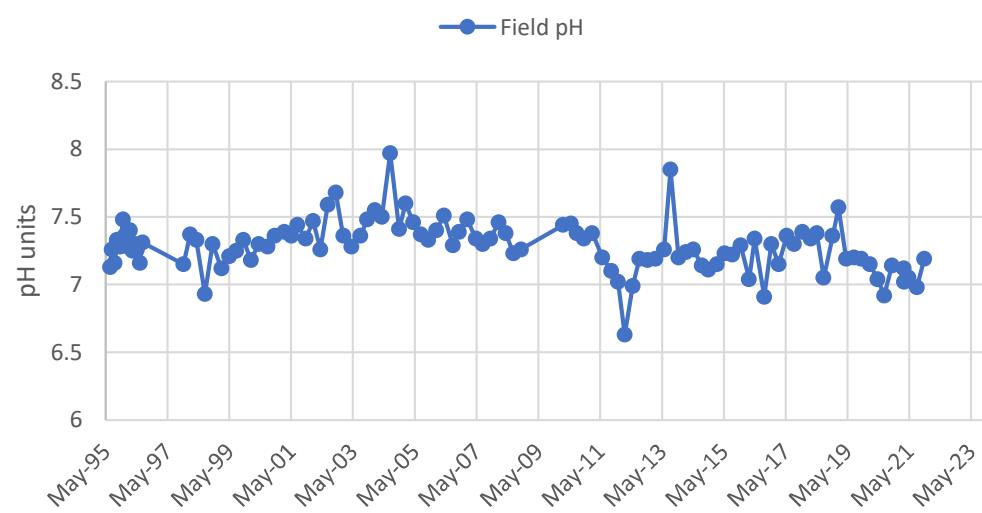
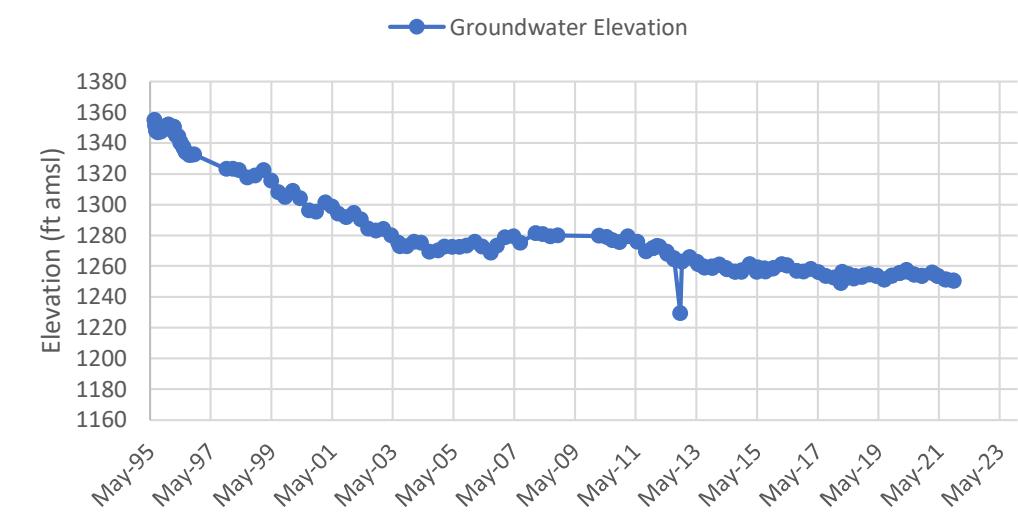


Figure 2d. Groundwater Elevation

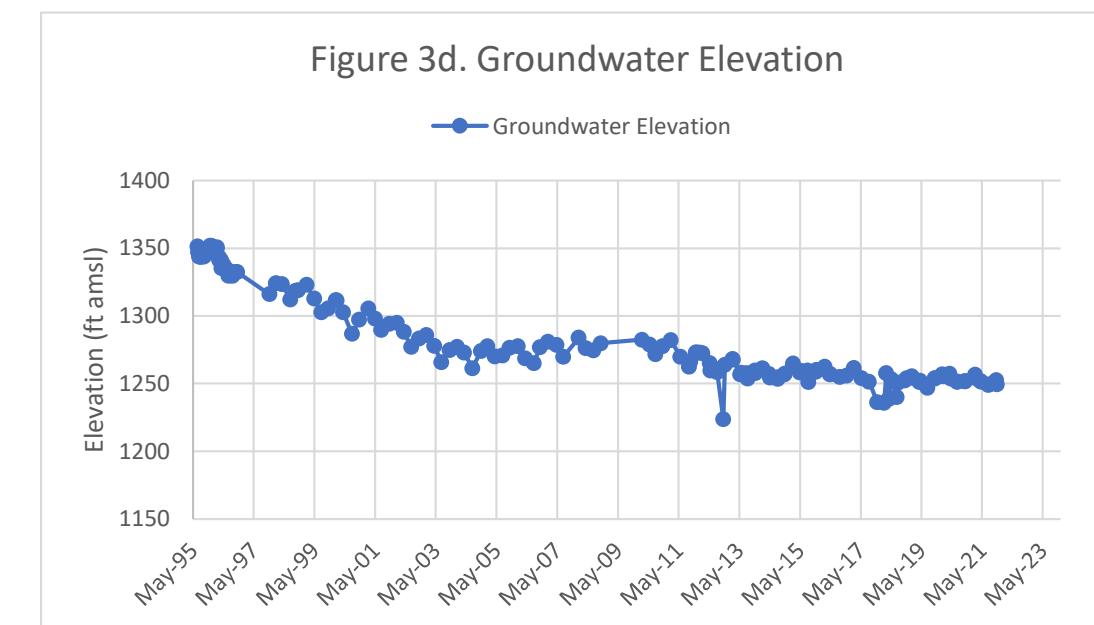
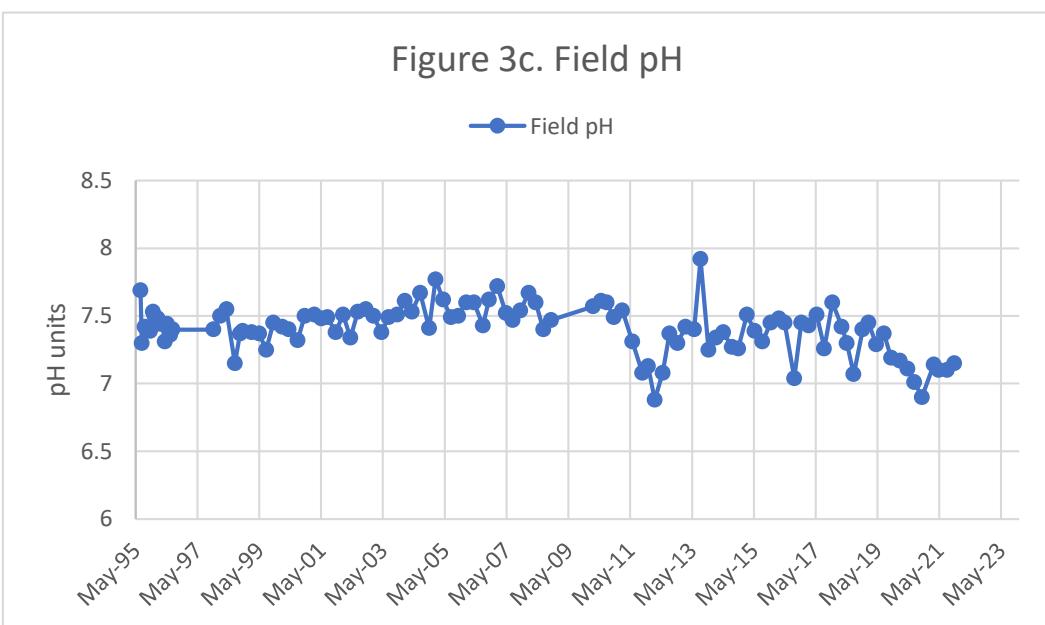
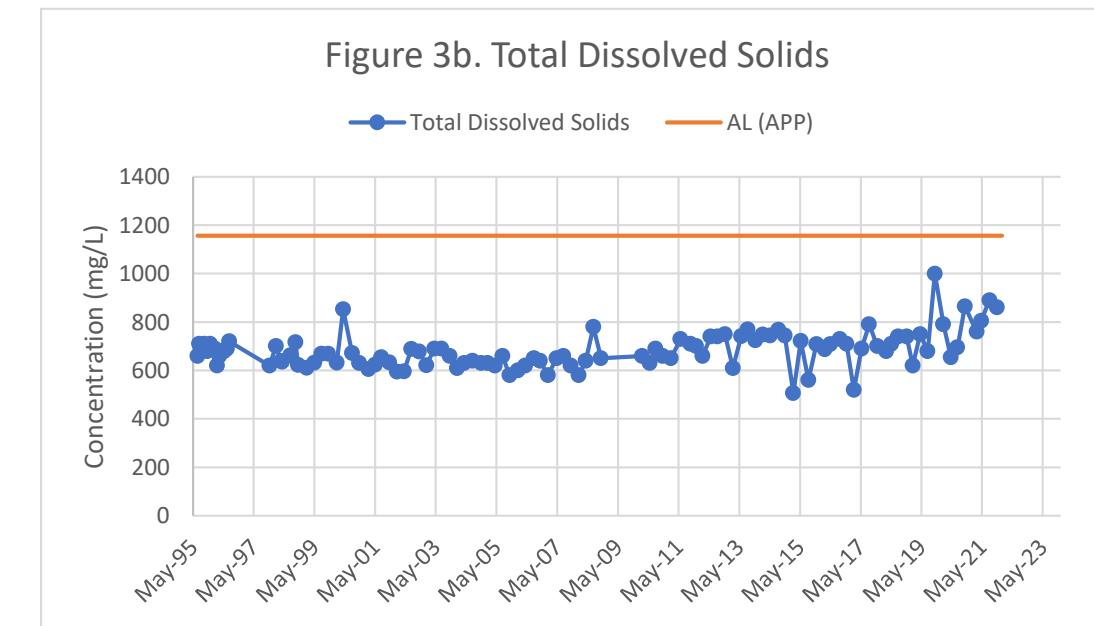
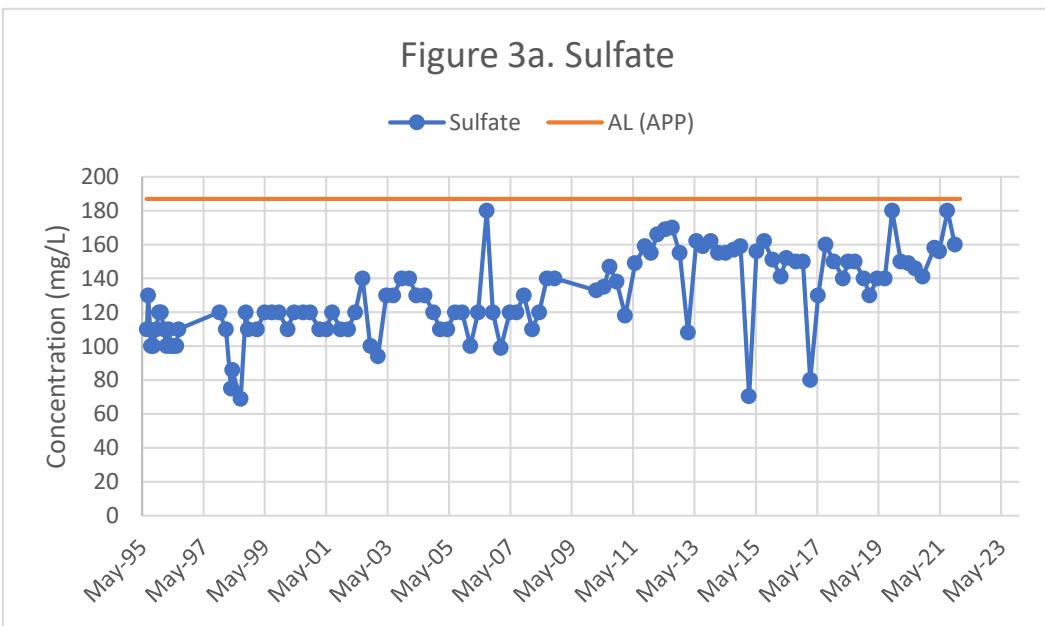


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M3-GL QUARTERLY CONCENTRATION GRAPHS

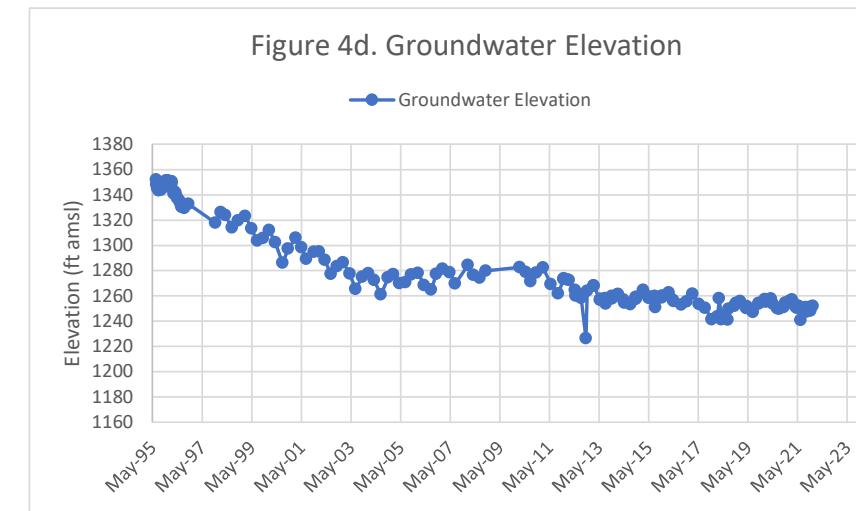
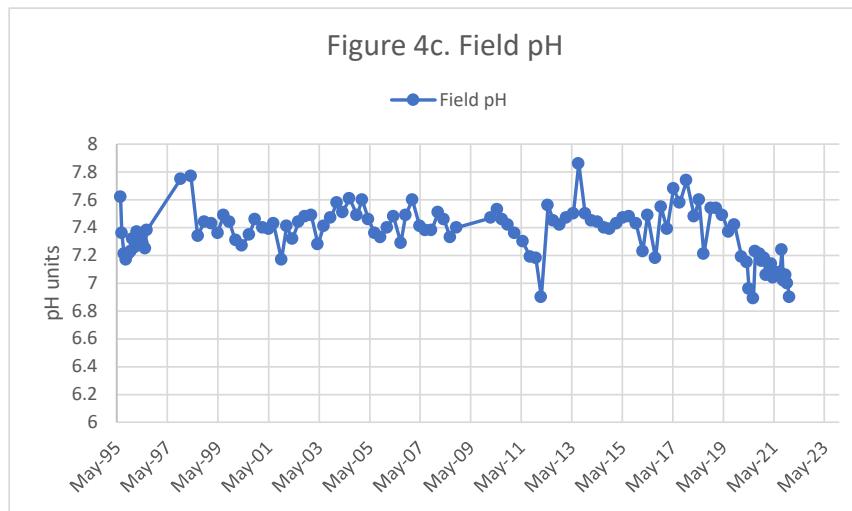
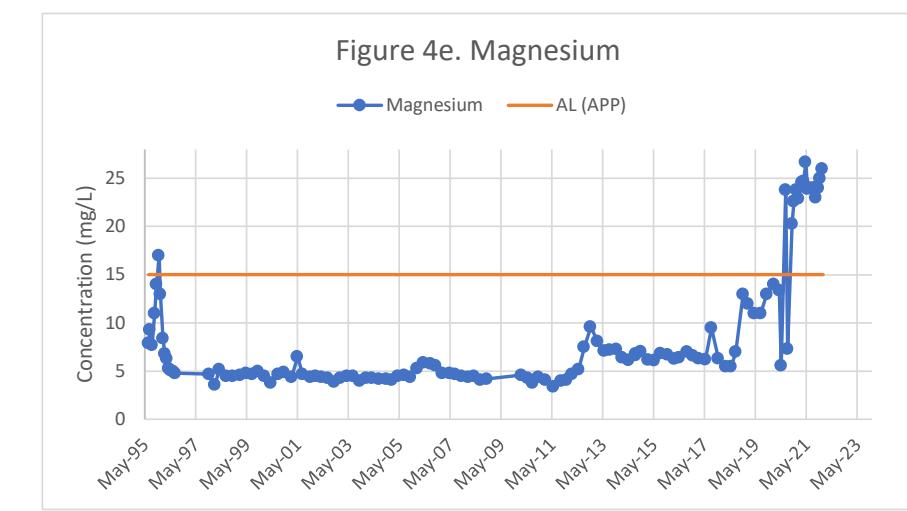
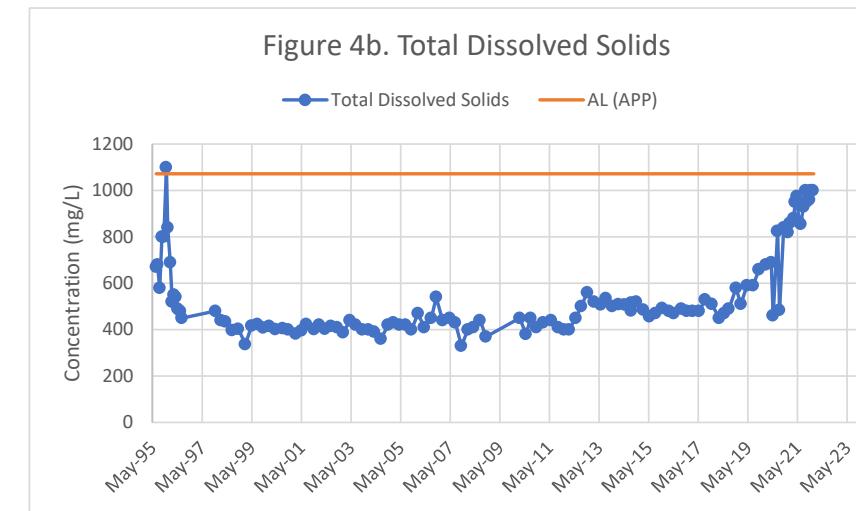
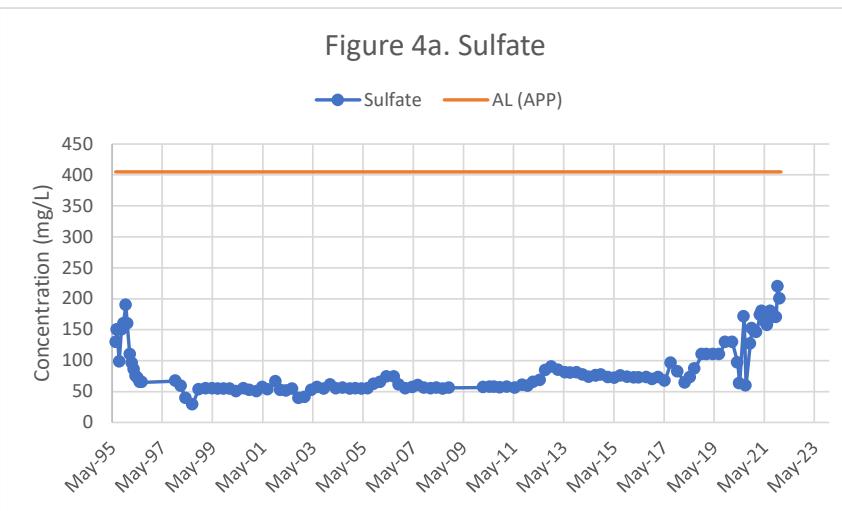


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M4-O QUARTERLY CONCENTRATION GRAPHS



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M6-GU QUARTERLY CONCENTRATION GRAPHS

Figure 5a. Sulfate

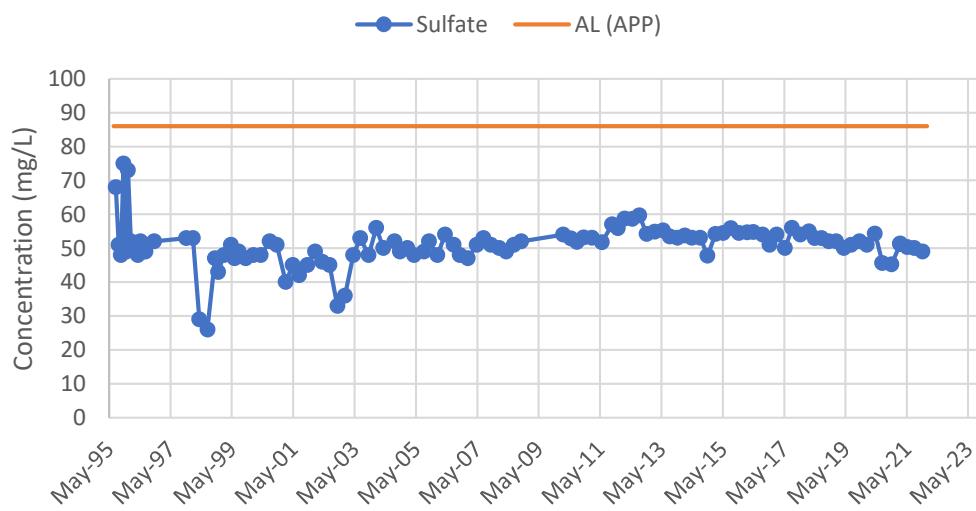


Figure 5b. Total Dissolved Solids

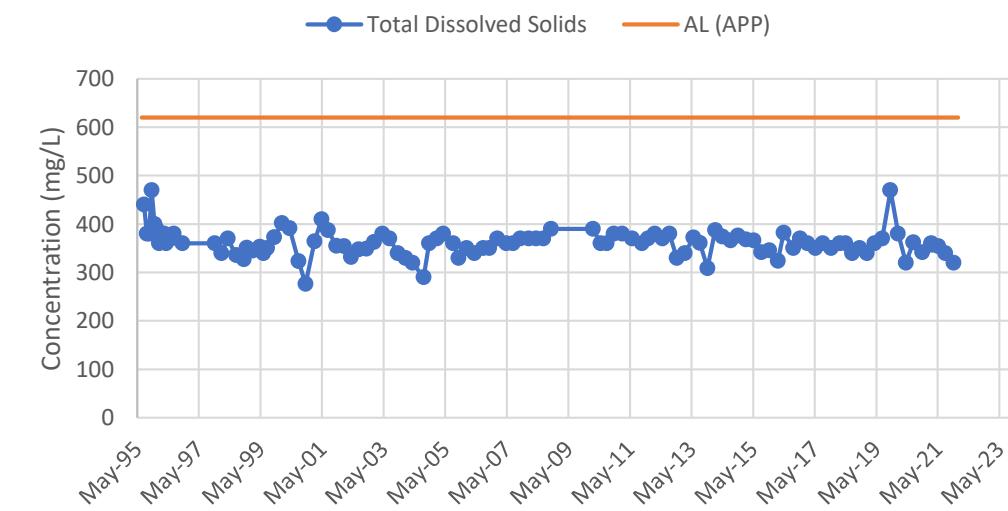


Figure 5c. Field pH

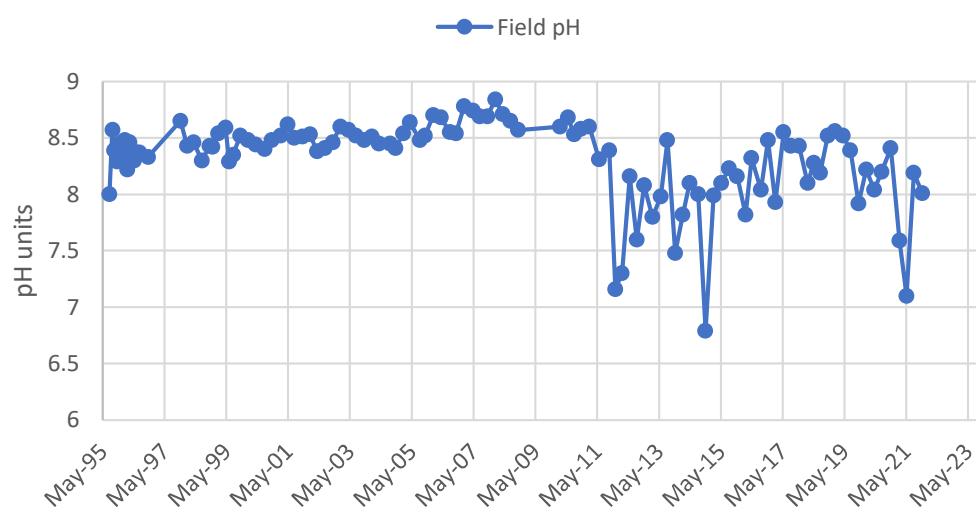
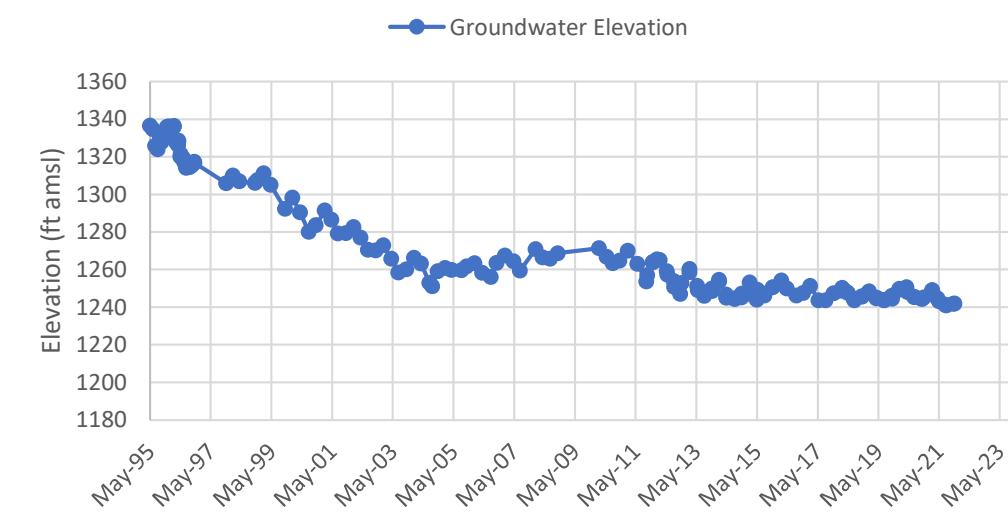


Figure 5d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M7-GL QUARTERLY CONCENTRATION GRAPHS

Figure 6a. Sulfate

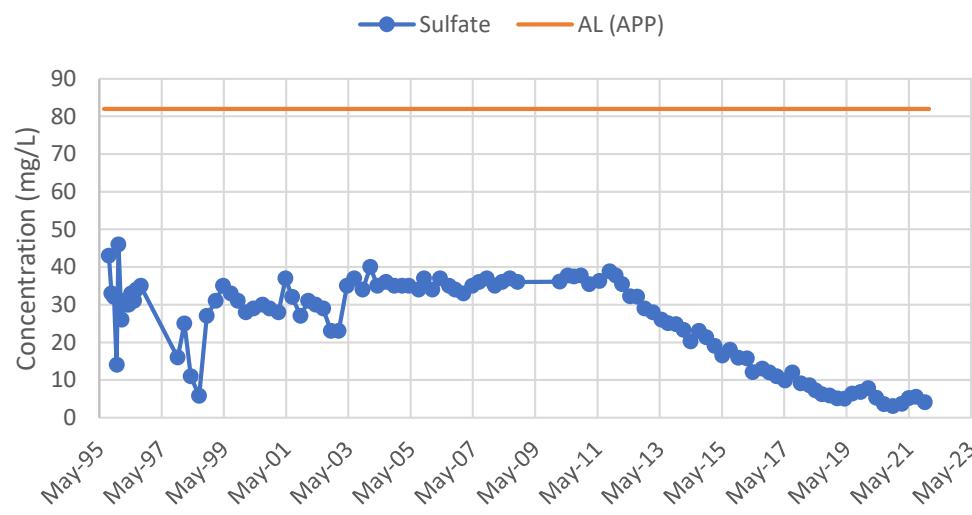


Figure 6b. Total Dissolved Solids

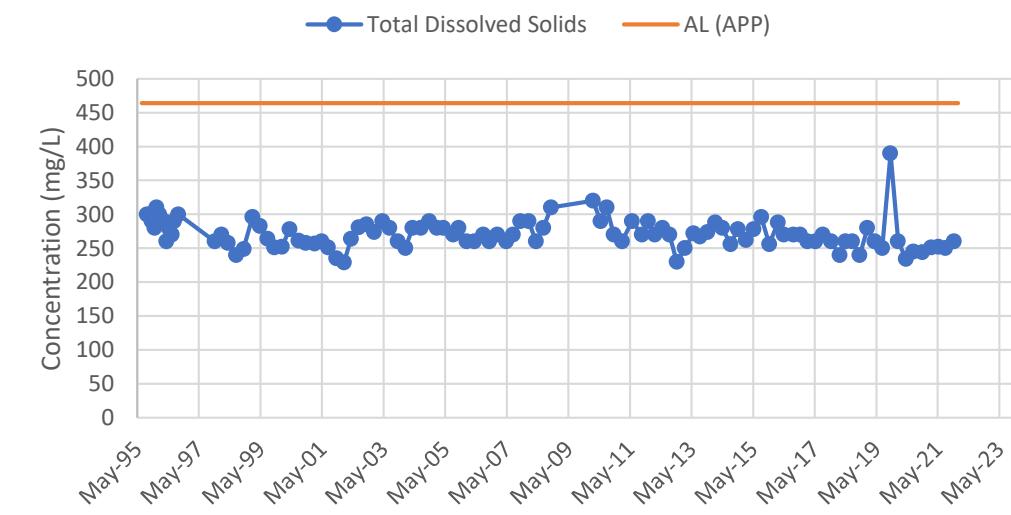


Figure 6c. Field pH

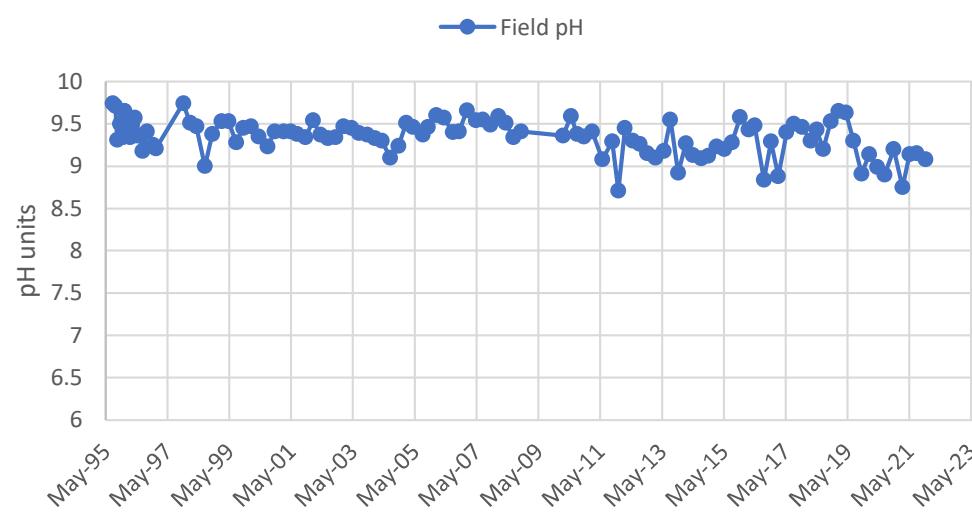
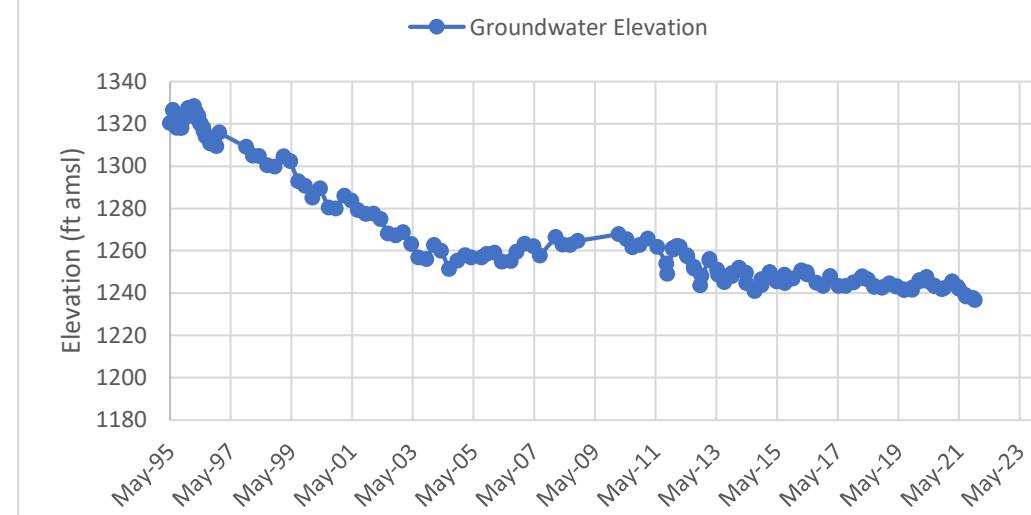


Figure 6d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M8-O QUARTERLY CONCENTRATION GRAPHS

Figure 7a. Sulfate

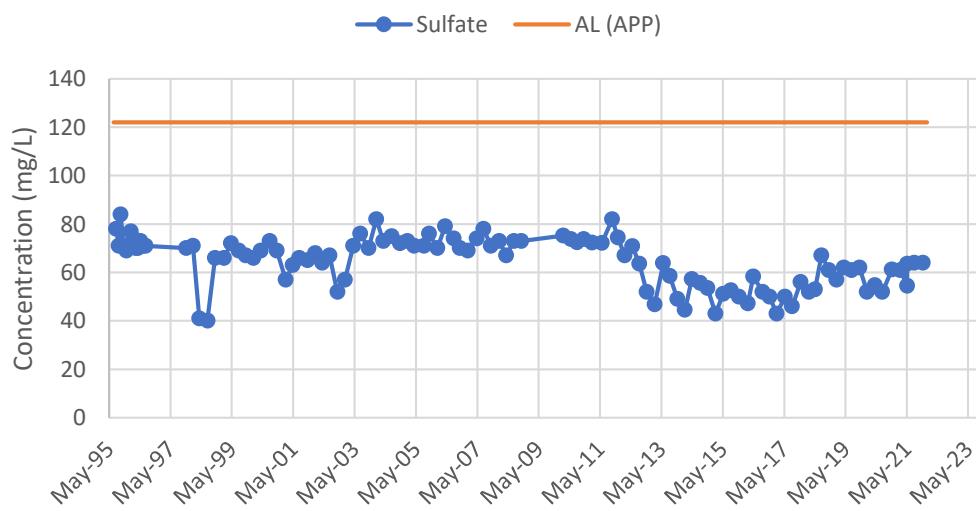


Figure 7b. Total Dissolved Solids

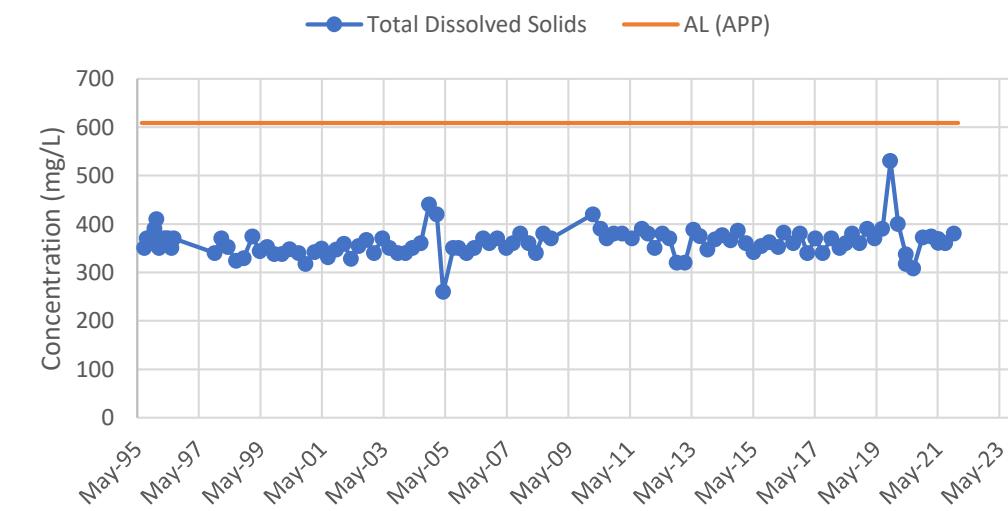


Figure 7c. Field pH

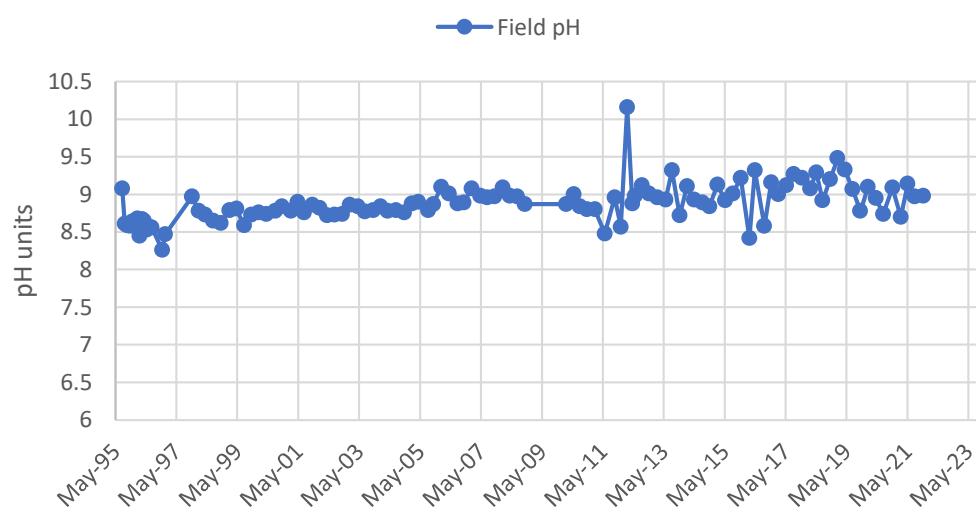
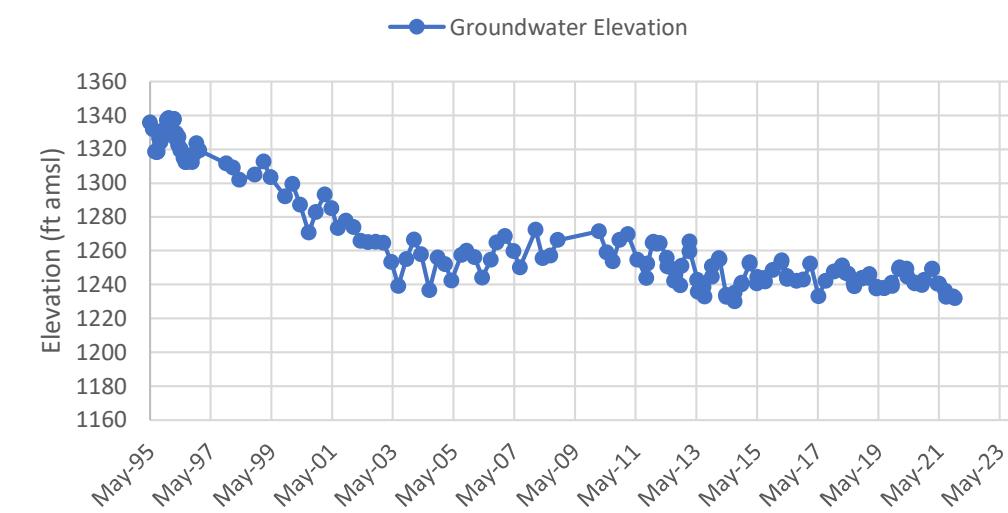


Figure 7d. Groundwater Elevation

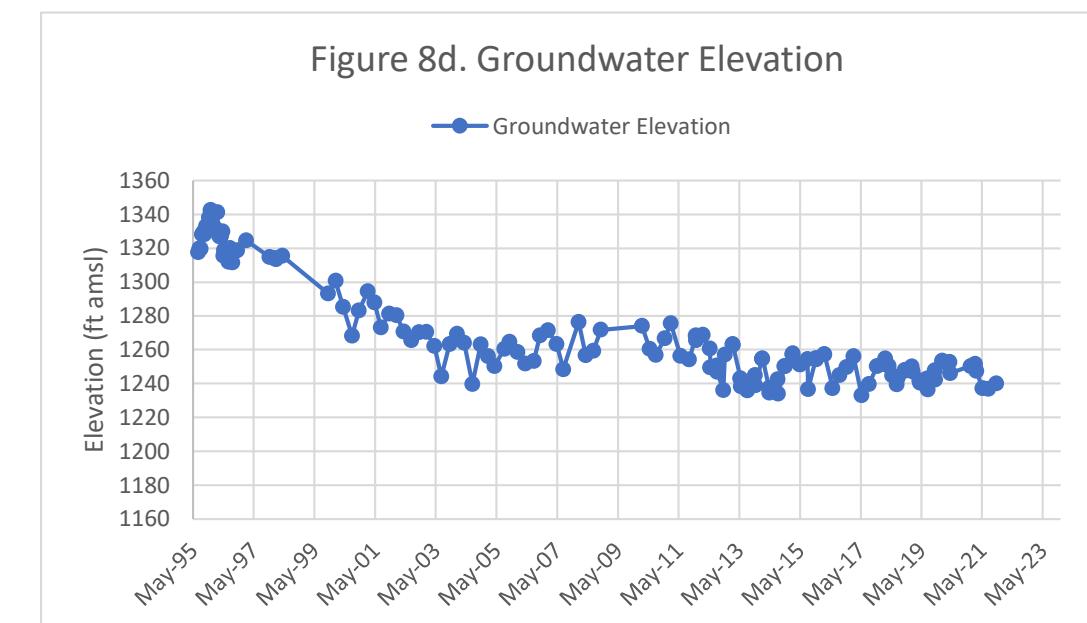
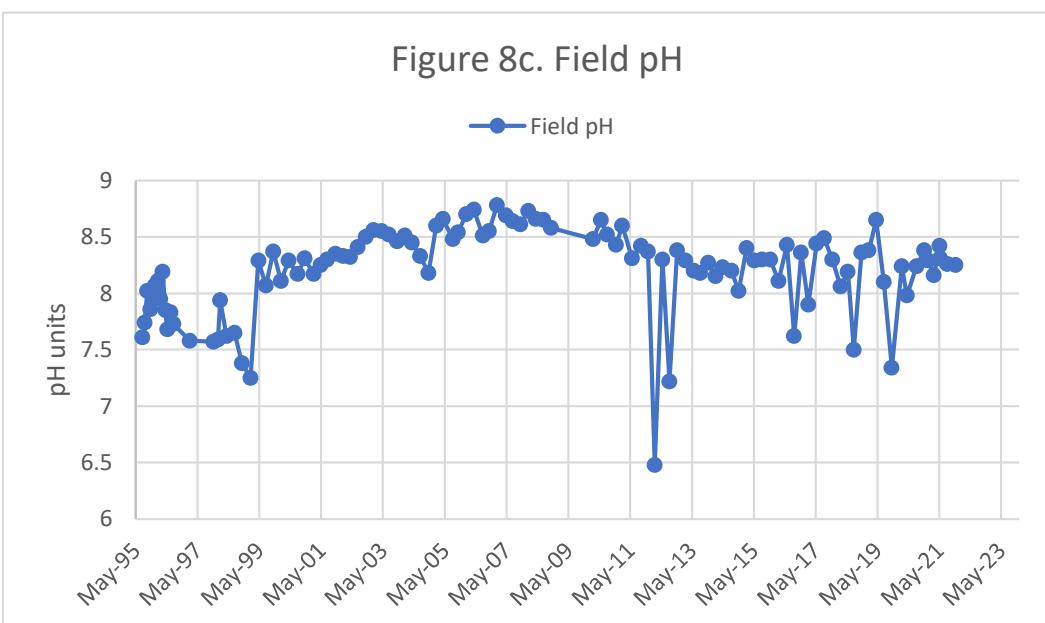
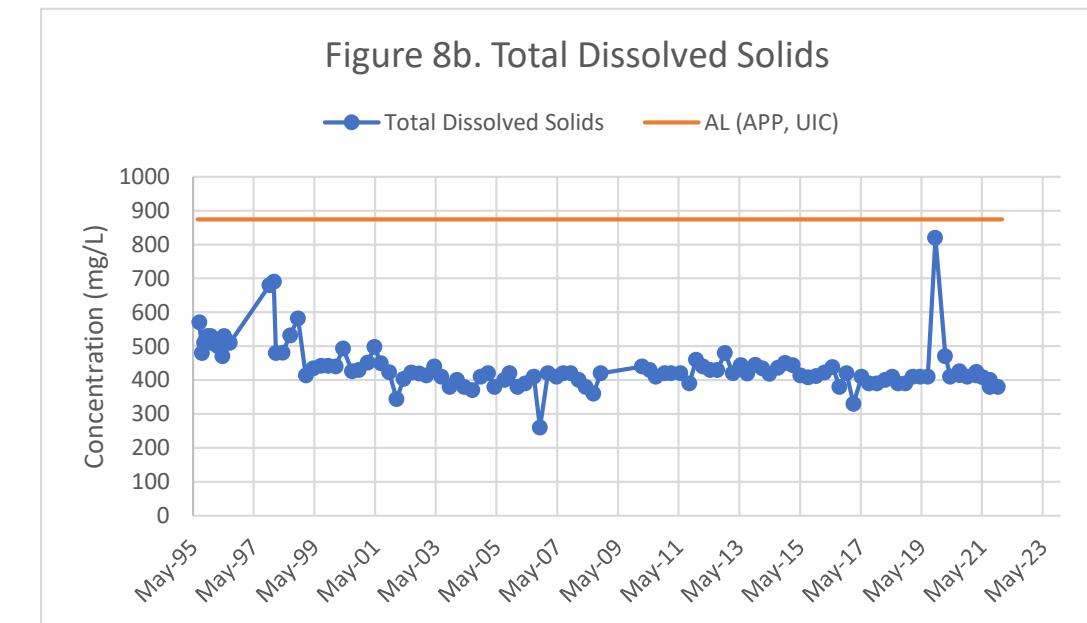
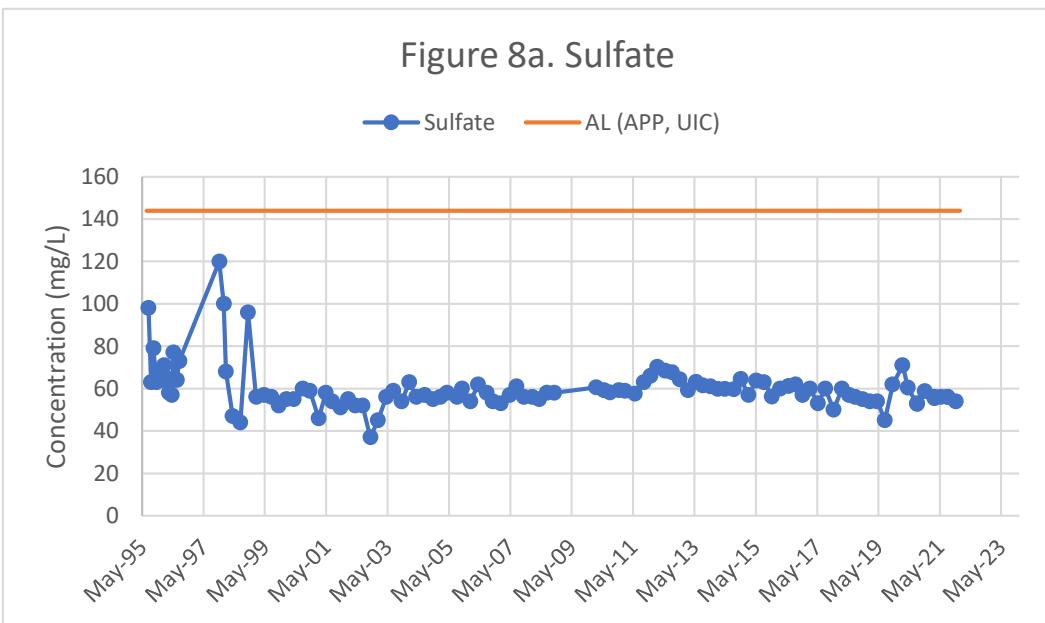


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M14-GL QUARTERLY CONCENTRATION GRAPHS



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

M15-GU QUARTERLY CONCENTRATION GRAPHS

Figure 9a. Sulfate

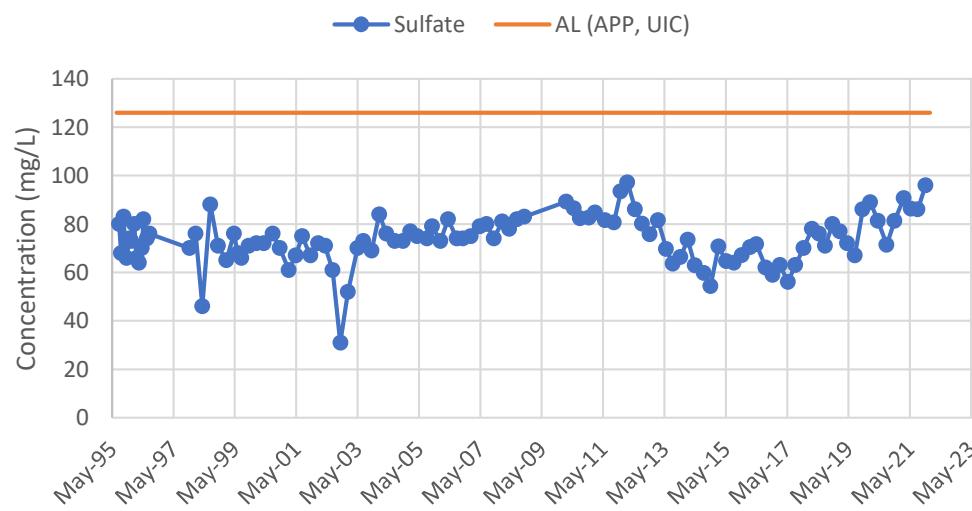


Figure 9b. Total Dissolved Solids

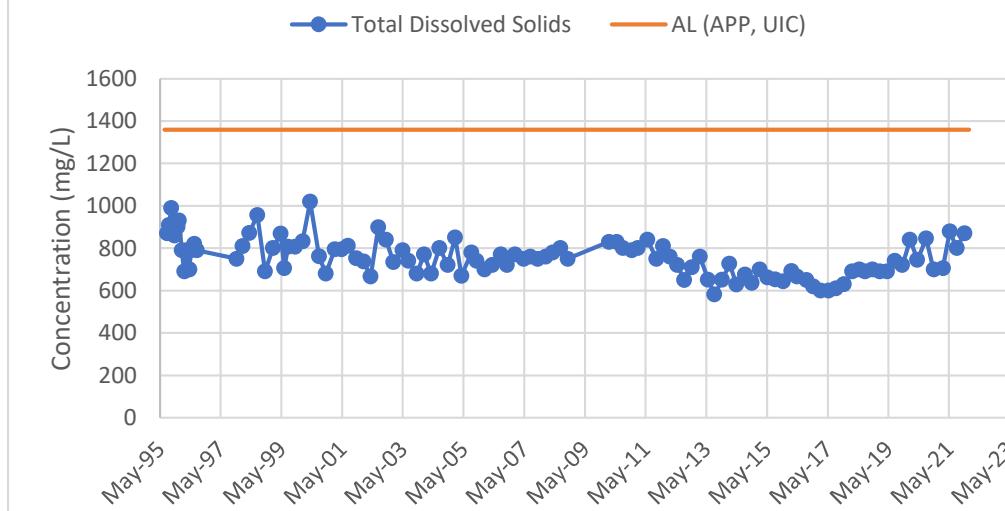


Figure 9c. Field pH

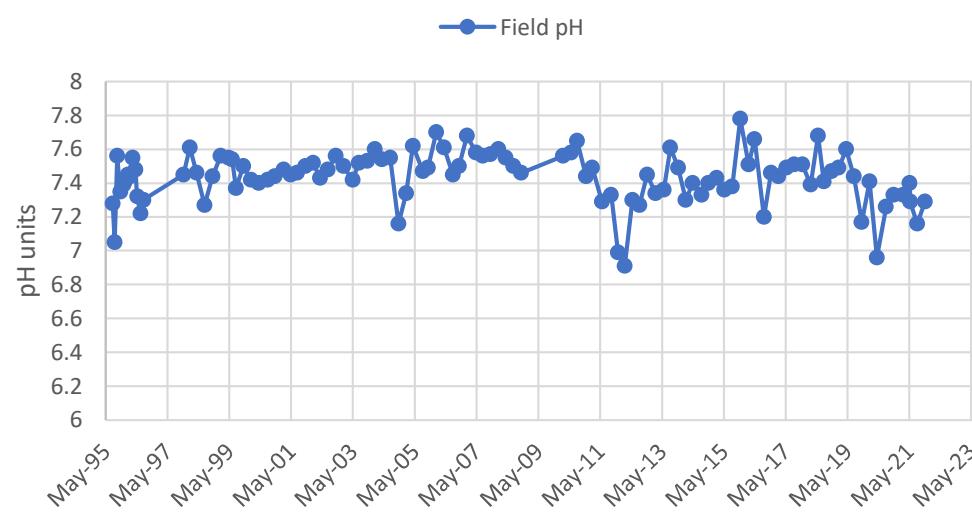
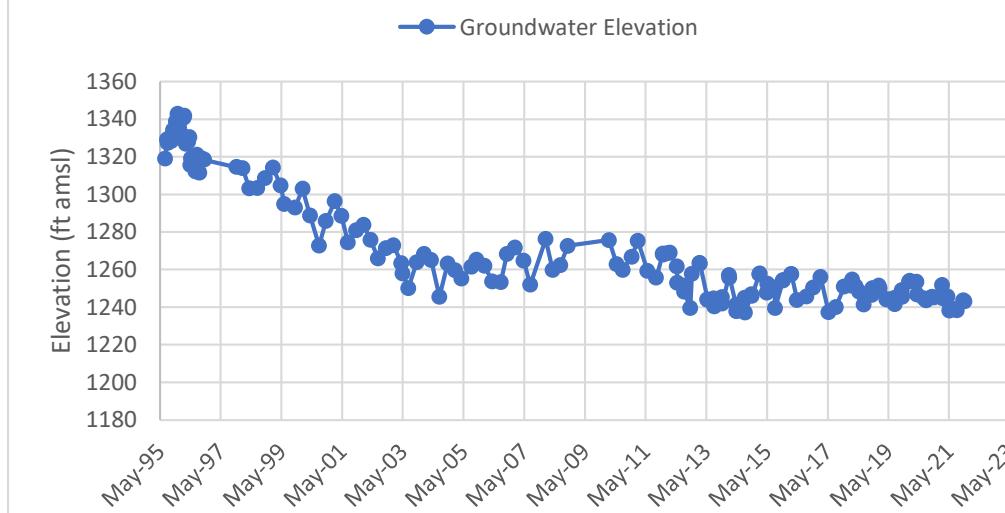


Figure 9d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

M16-GU(R) QUARTERLY CONCENTRATION GRAPHS

Figure 10a. Sulfate

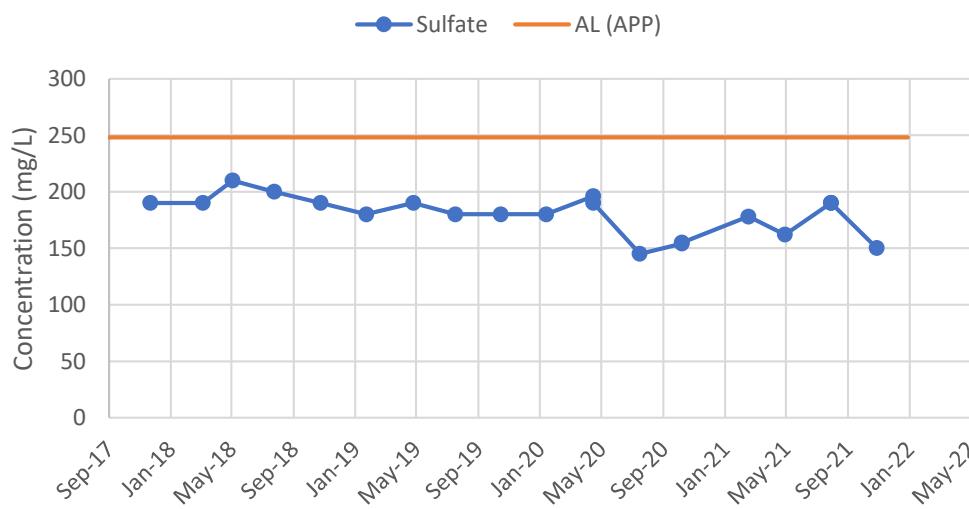


Figure 10b. Total Dissolved Solids

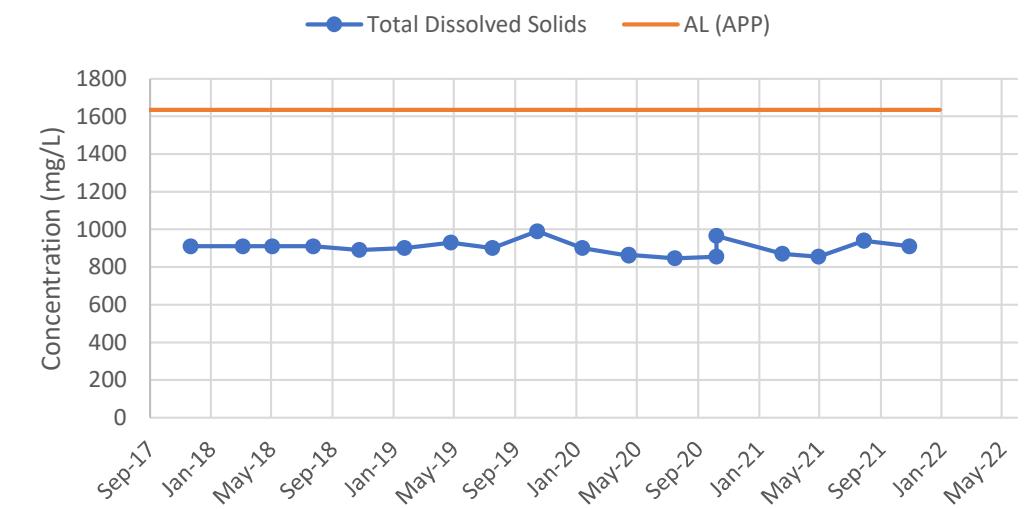


Figure 10c. Field pH

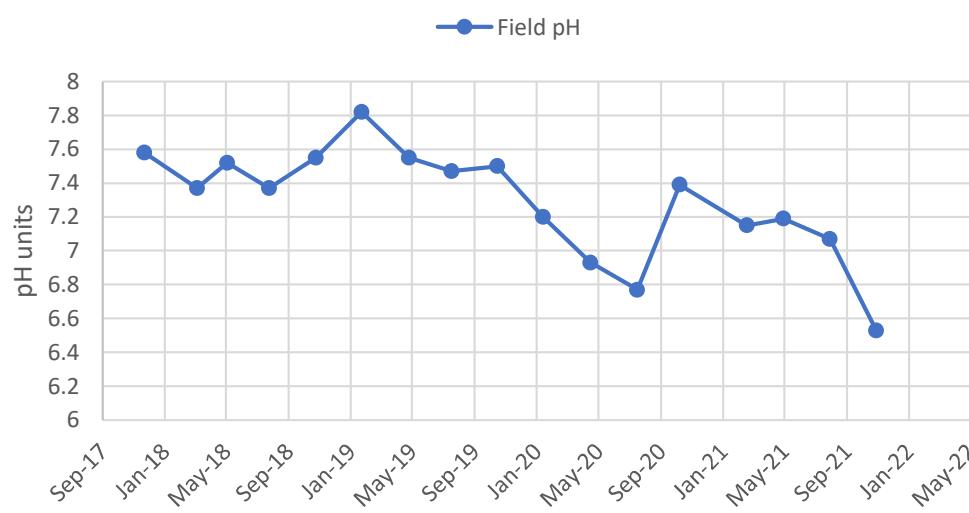
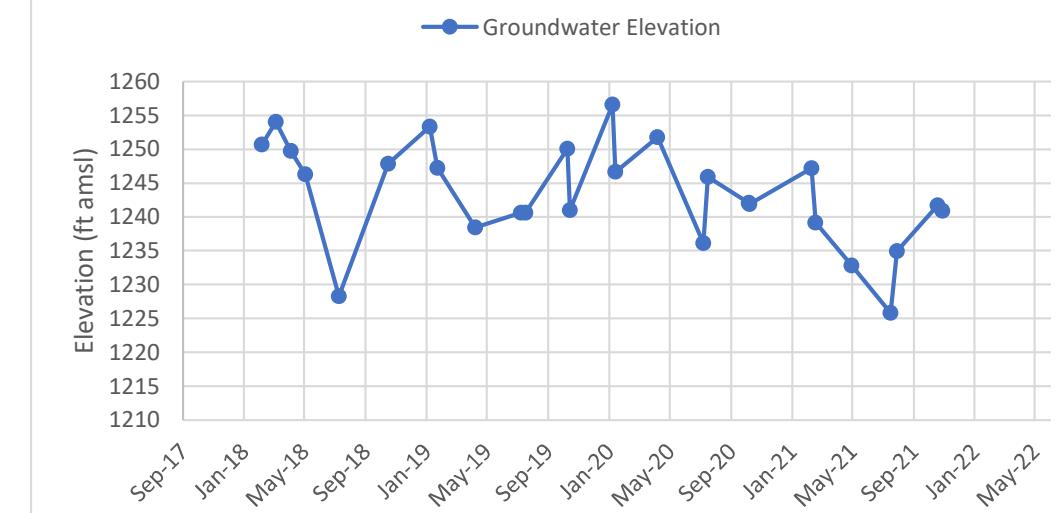


Figure 10d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M17-GL QUARTERLY CONCENTRATION GRAPHS

Figure 11a. Sulfate

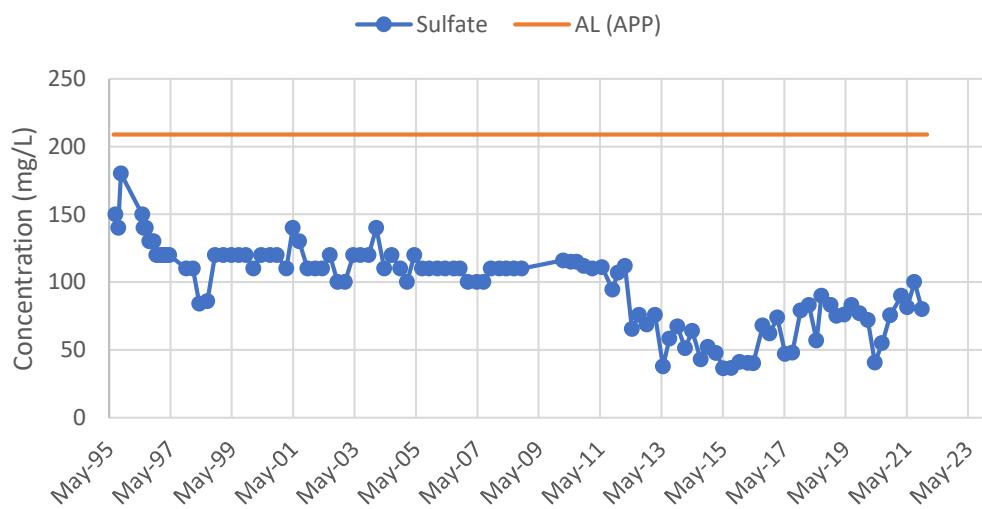


Figure 11b. Total Dissolved Solids

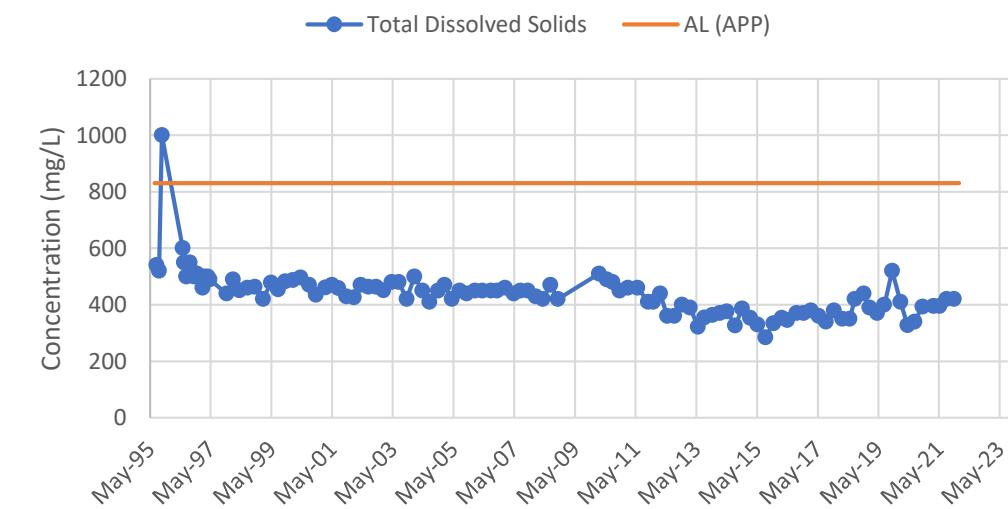


Figure 11c. Field pH

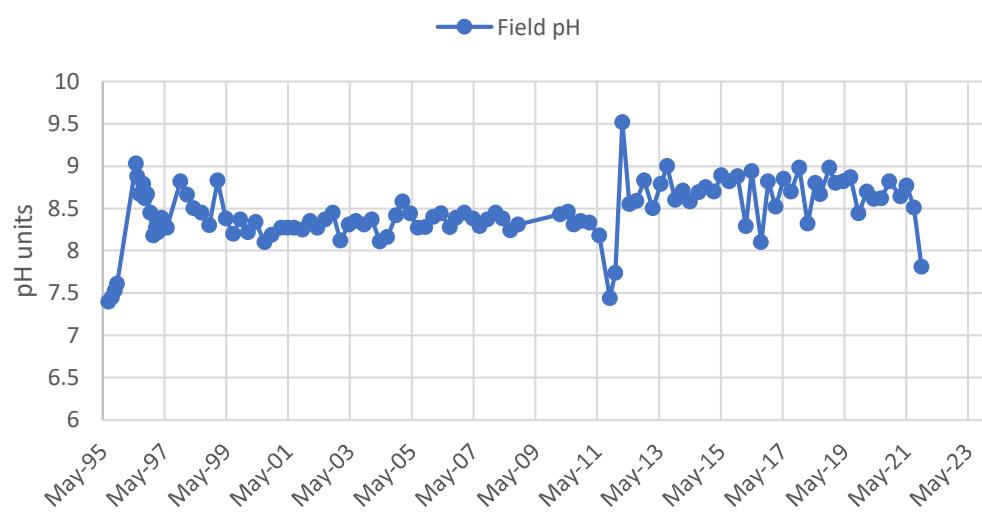
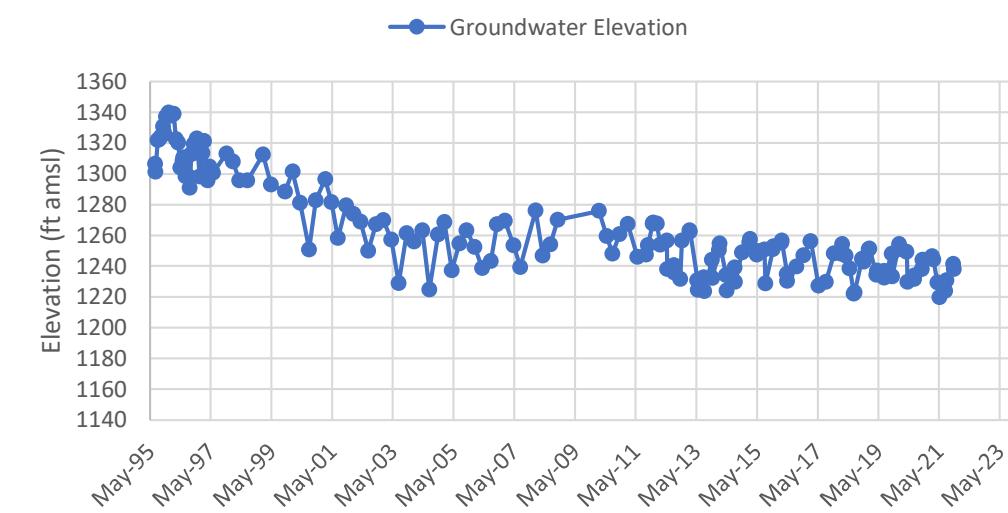


Figure 11d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M18-GU QUARTERLY CONCENTRATION GRAPHS

Figure 12a. Sulfate

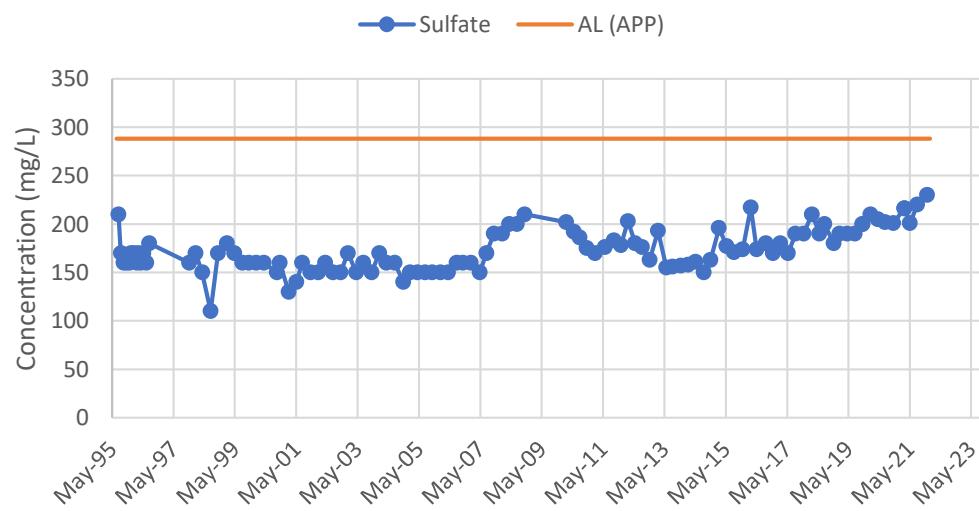


Figure 12b. Total Dissolved Solids

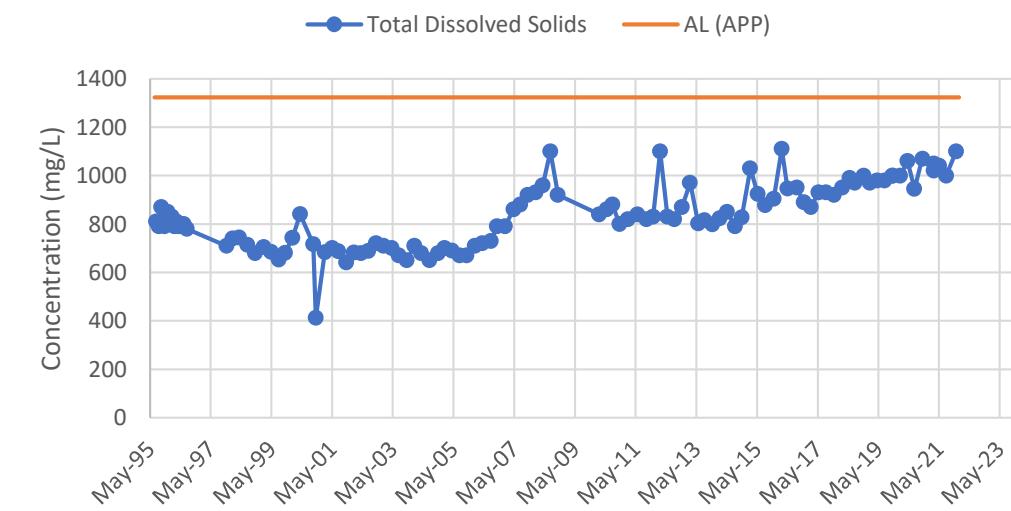


Figure 12c. Field pH

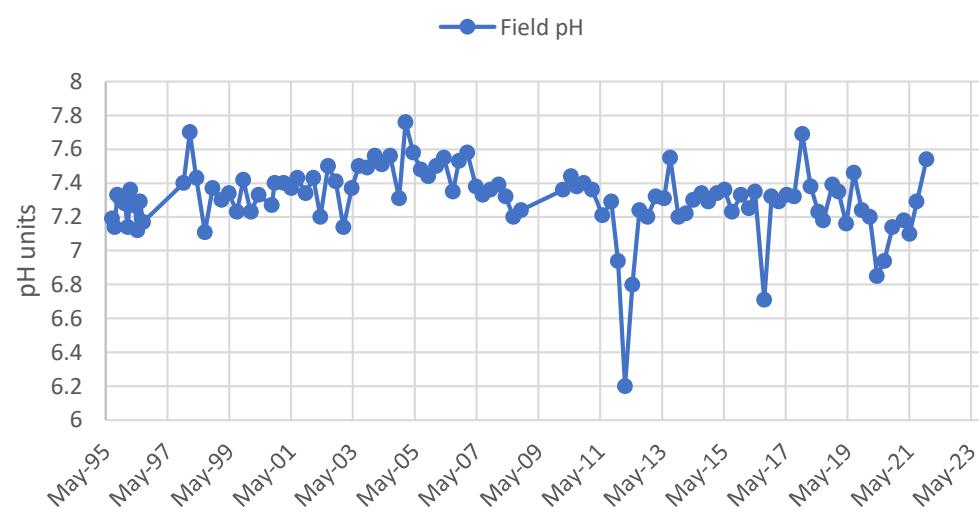
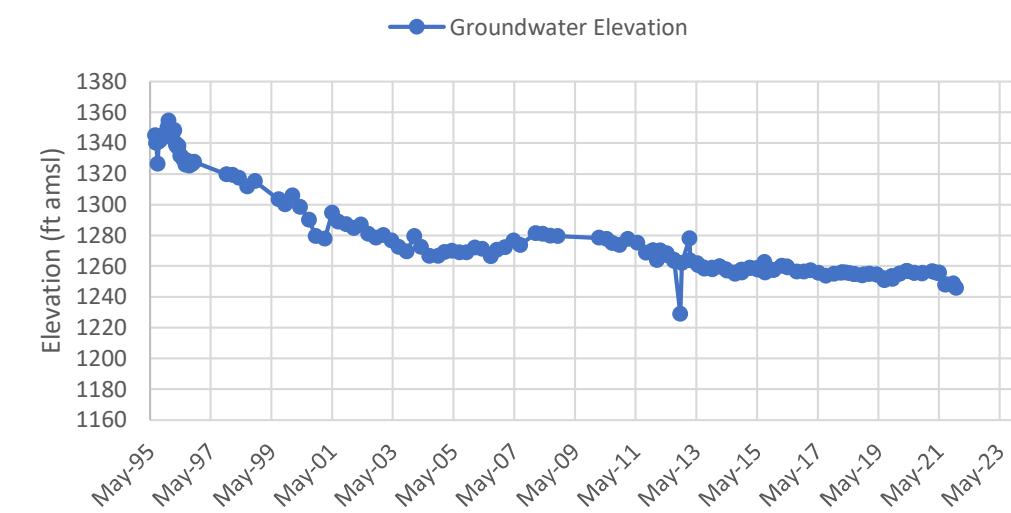


Figure 12d. Groundwater Elevation

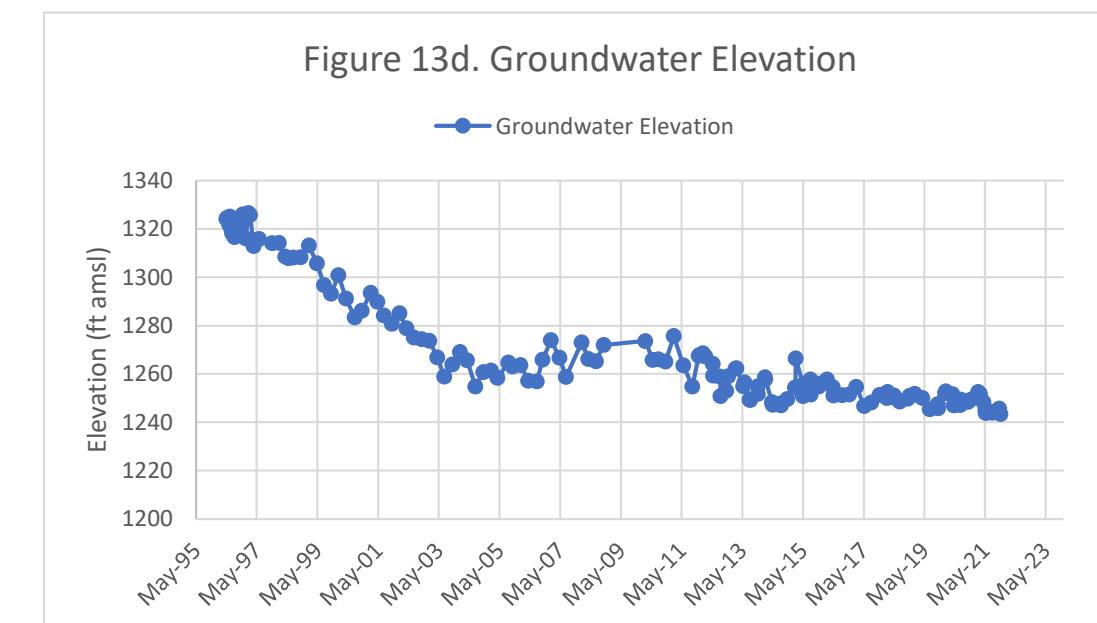
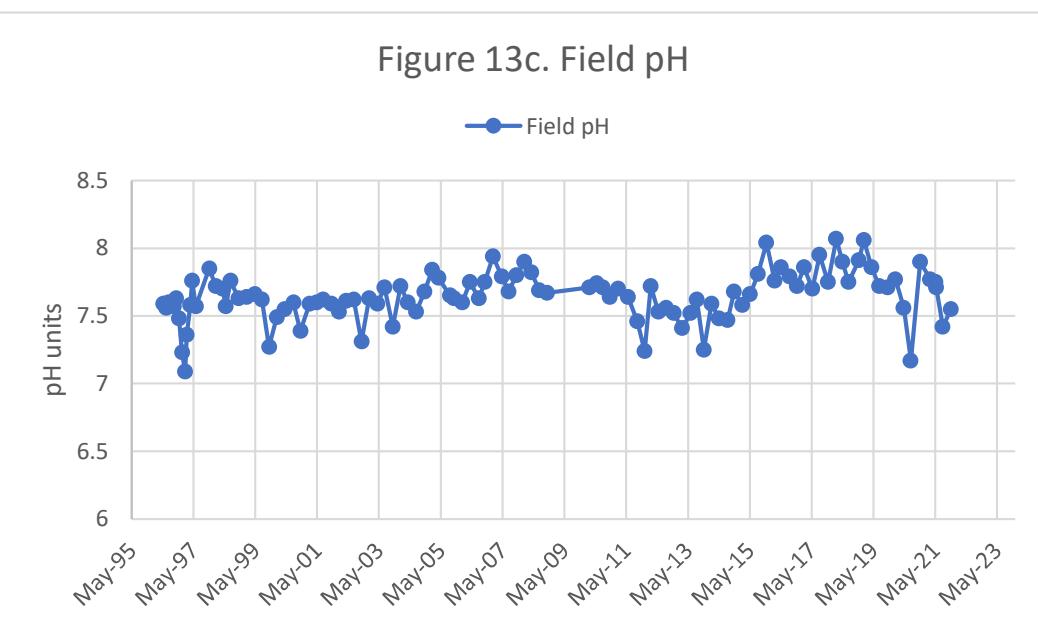
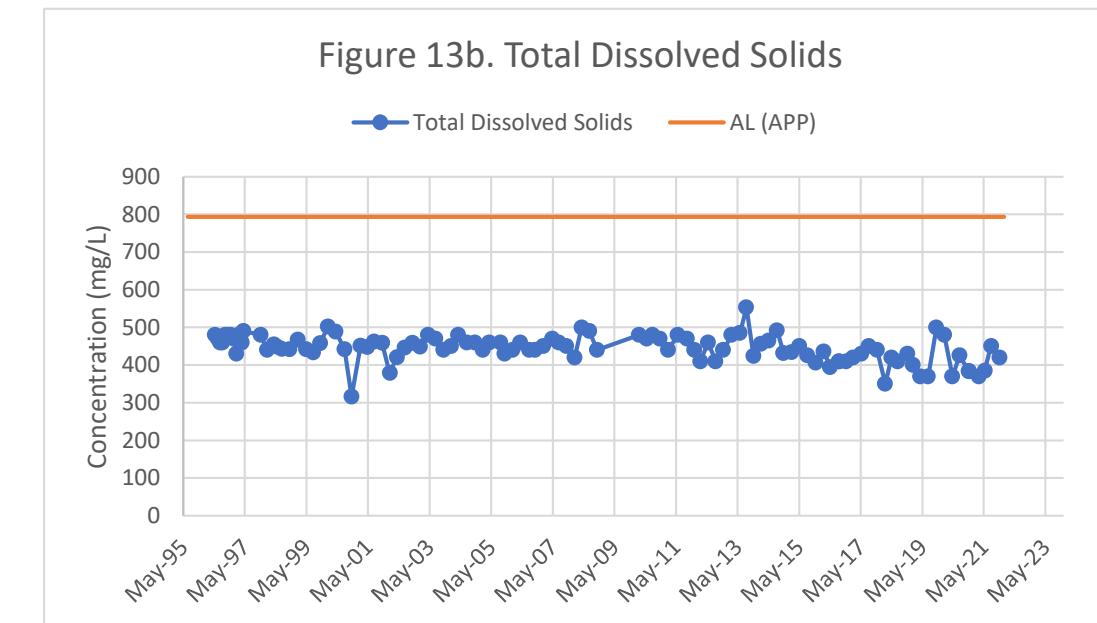
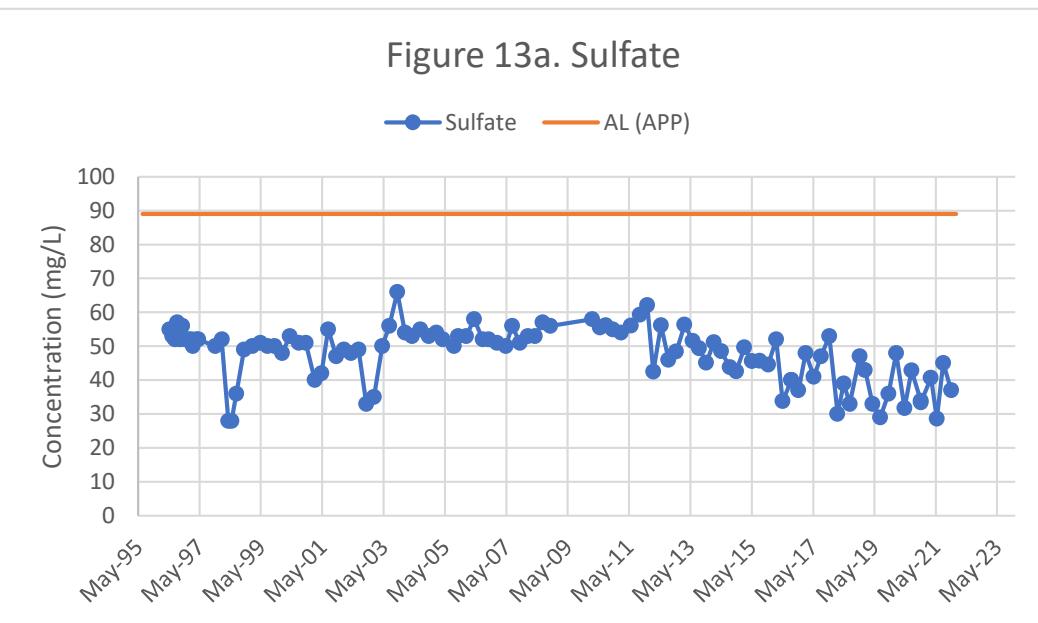


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M19-LBF QUARTERLY CONCENTRATION GRAPHS



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M20-O(R) QUARTERLY CONCENTRATION GRAPHS

Figure 14a. Sulfate

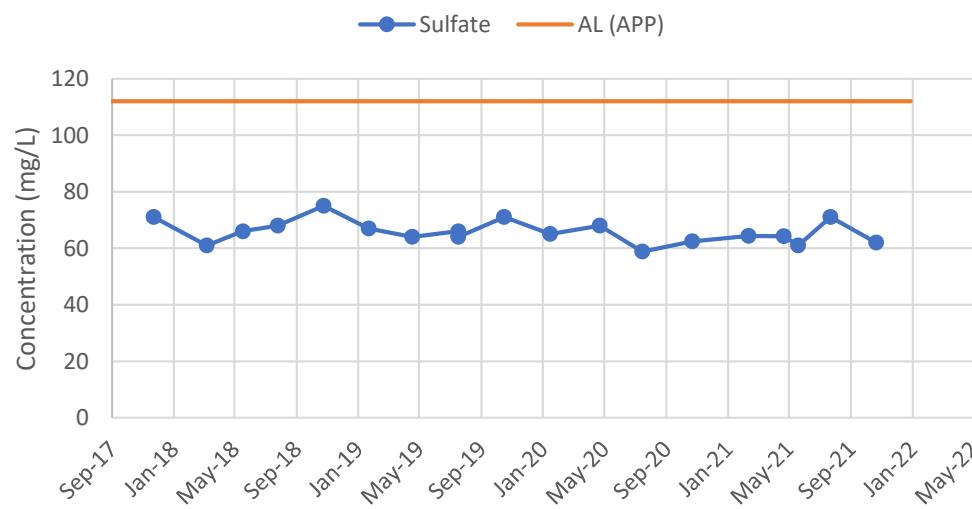


Figure 14b. Total Dissolved Solids

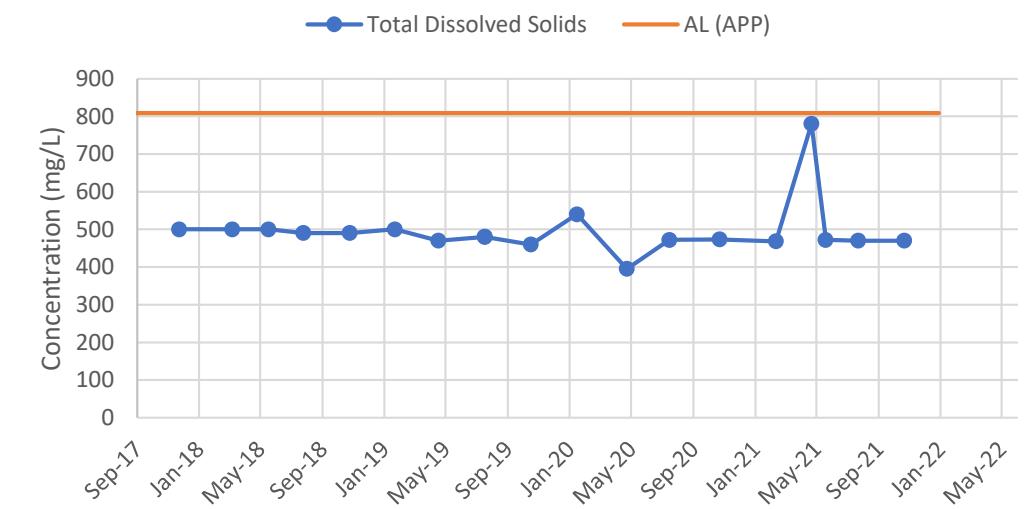


Figure 14c. Field pH

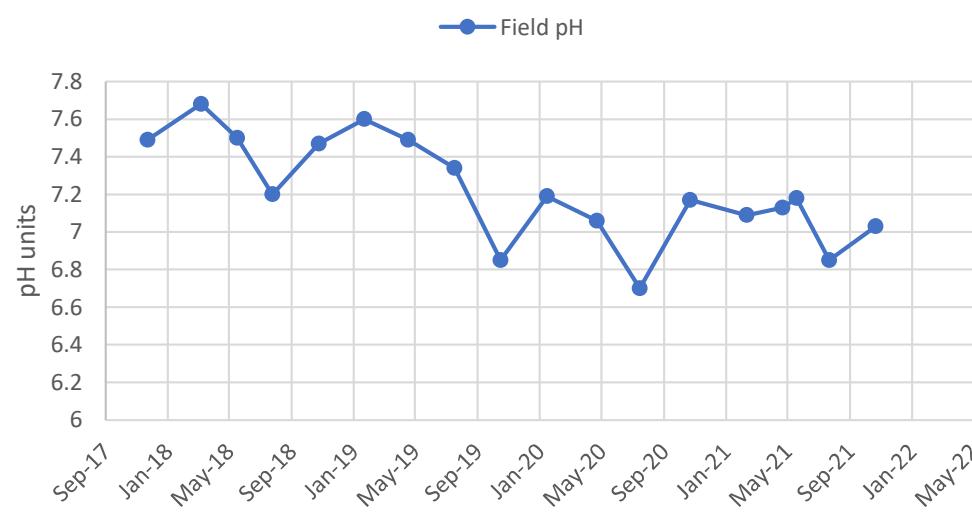
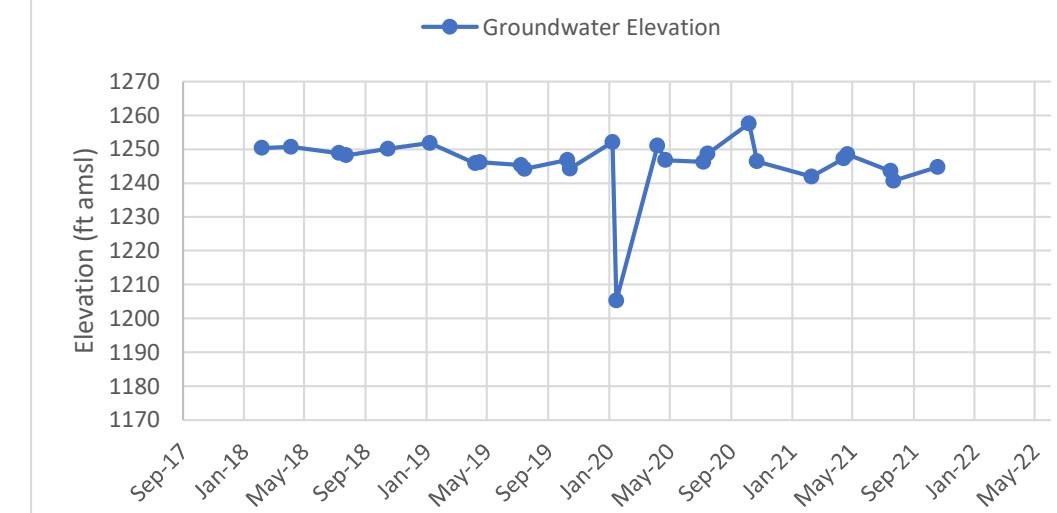


Figure 14d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M21-UBF QUARTERLY CONCENTRATION GRAPHS

Figure 15a. Sulfate

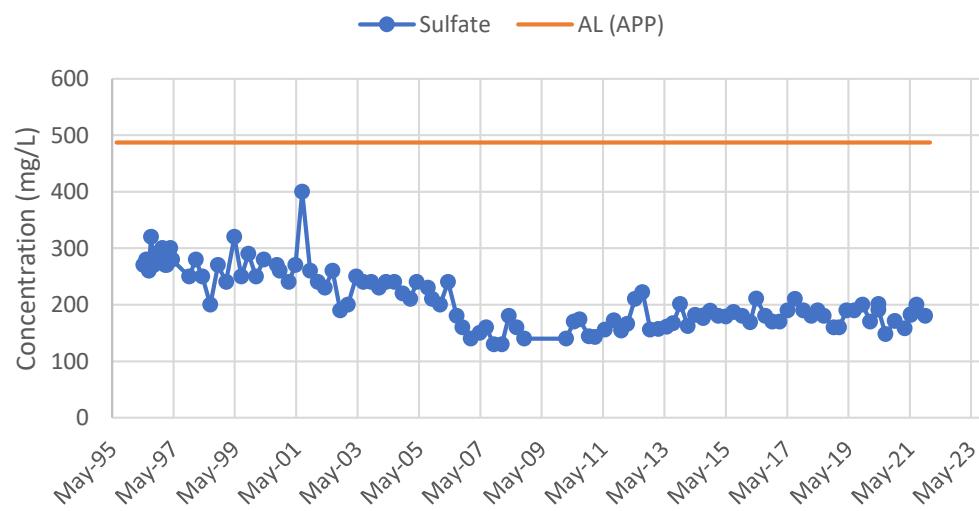


Figure 15b. Total Dissolved Solids

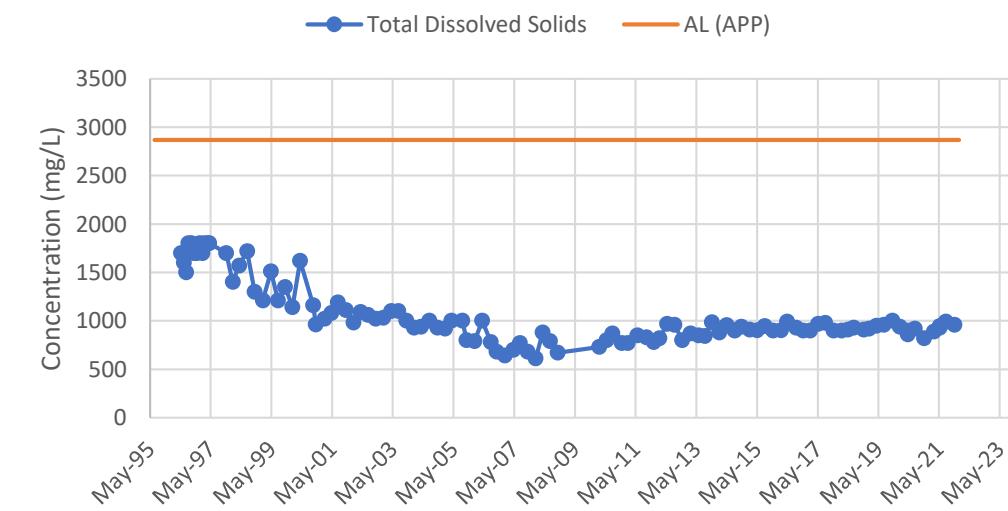


Figure 15c. Field pH

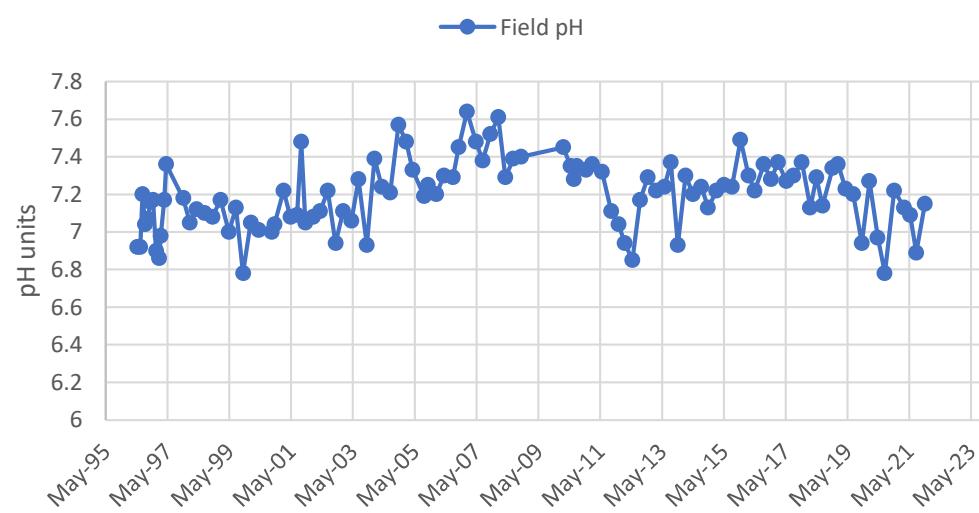
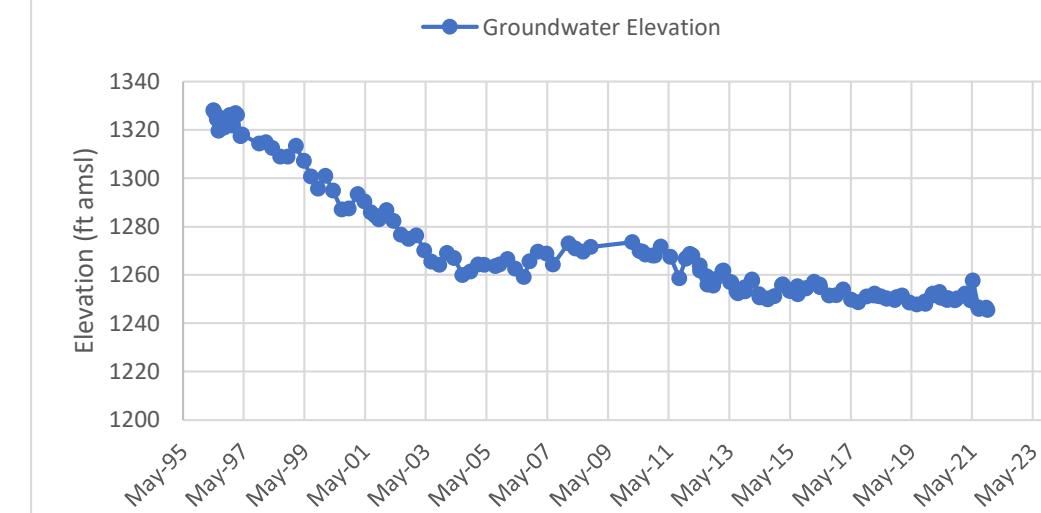


Figure 15d. Groundwater Elevation

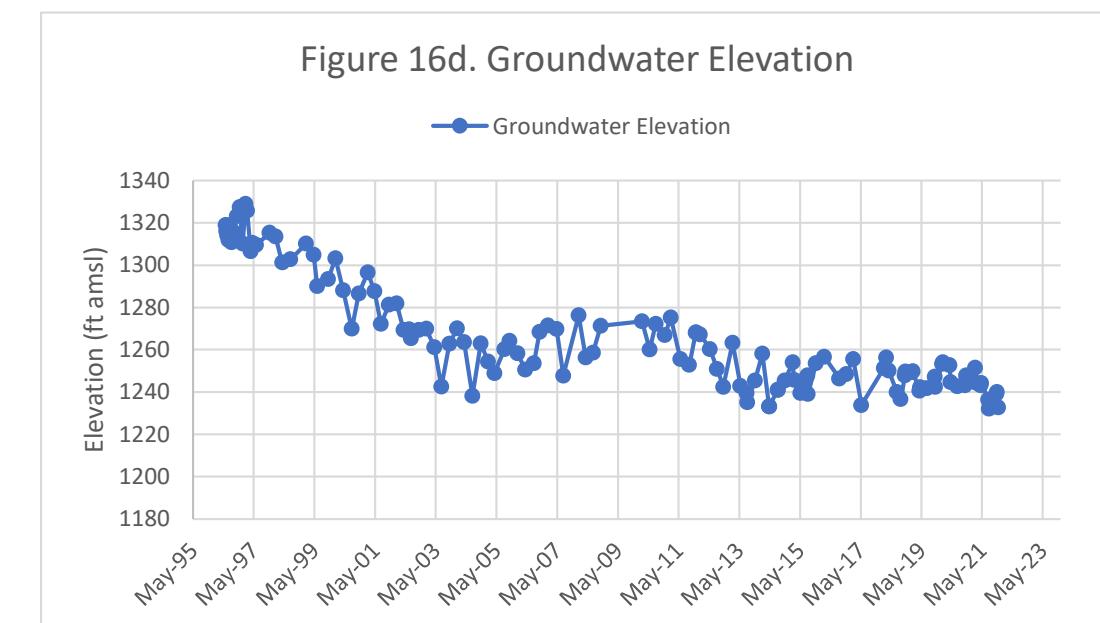
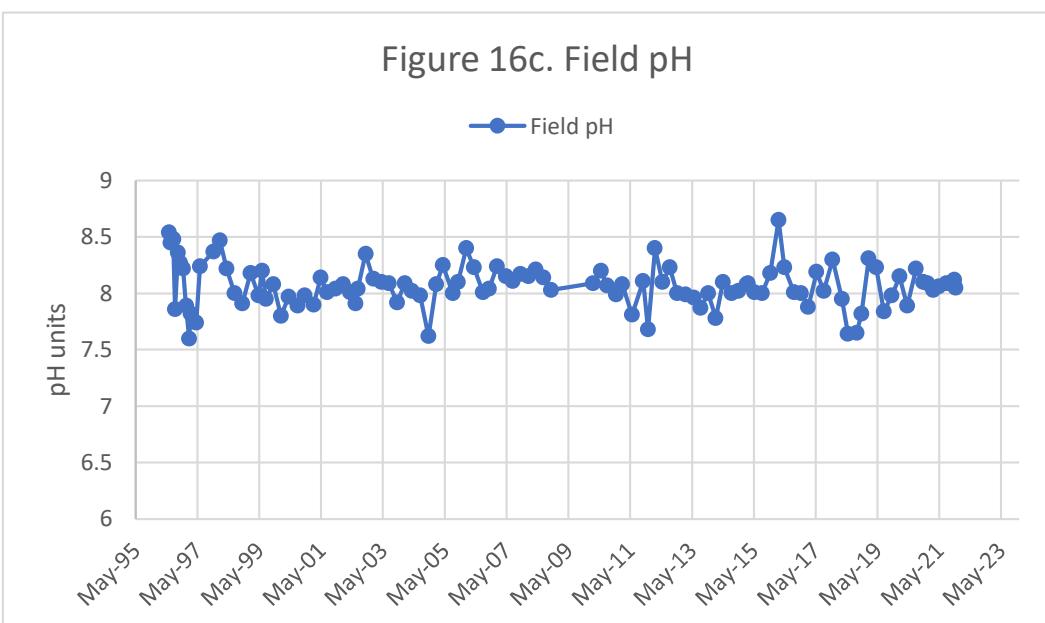
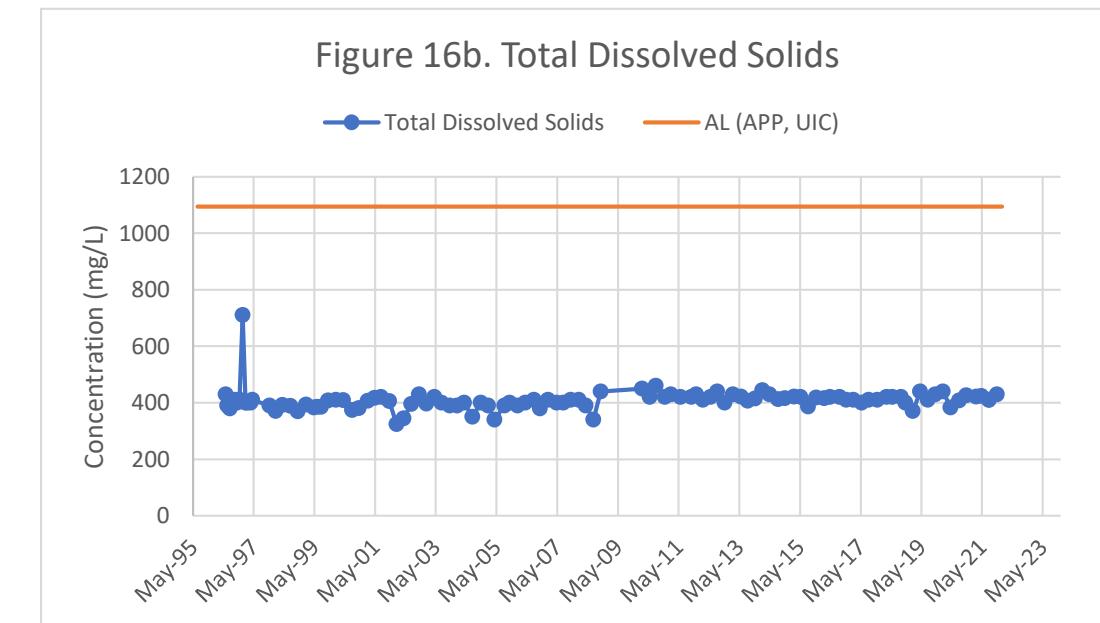
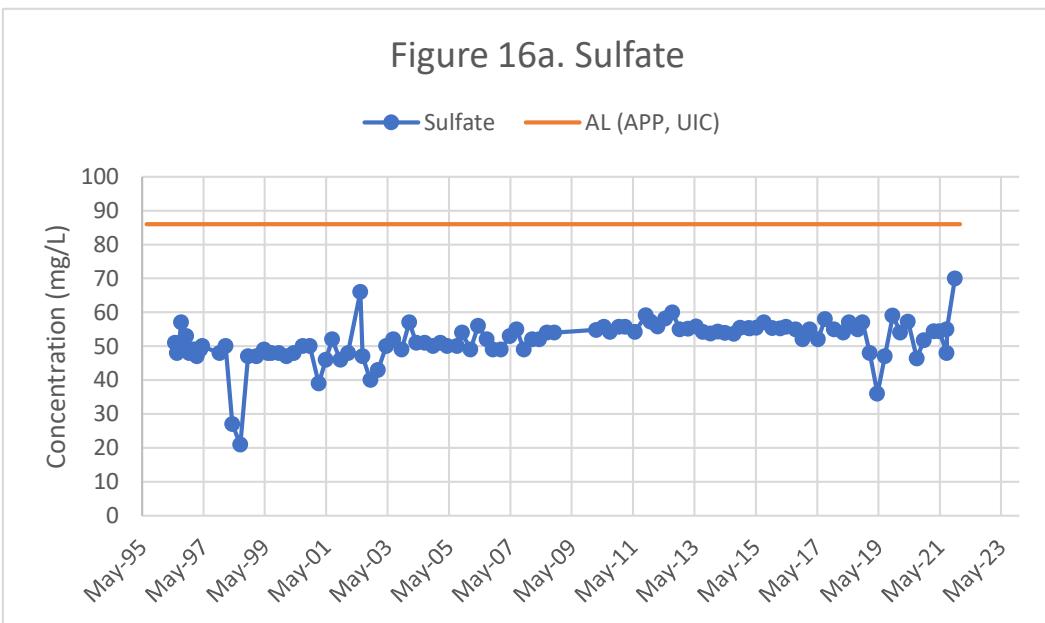


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M22-O QUARTERLY CONCENTRATION GRAPHS



Notes:

Historical outliers removed from graphs for visual representation, but are maintained in the dataset.

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

M23-UBF QUARTERLY CONCENTRATION GRAPHS

Figure 17a. Sulfate

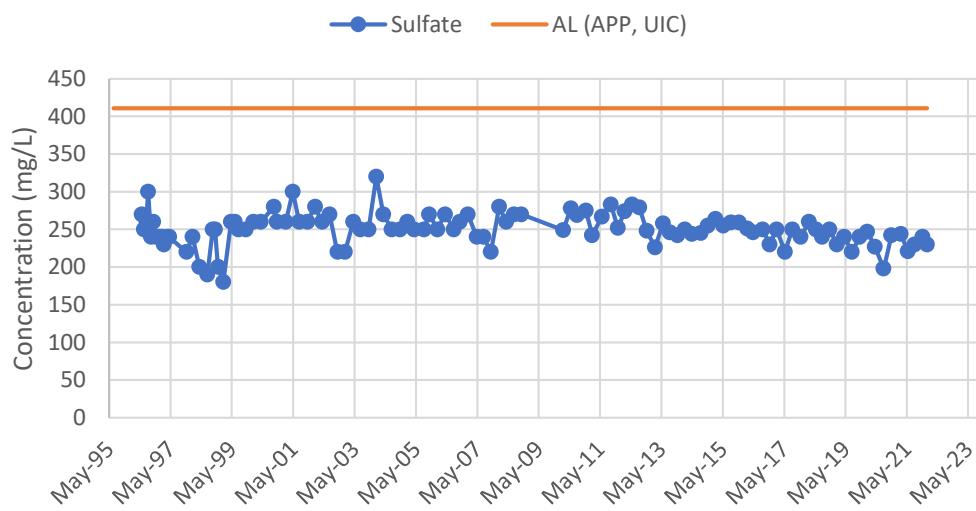


Figure 17b. Total Dissolved Solids

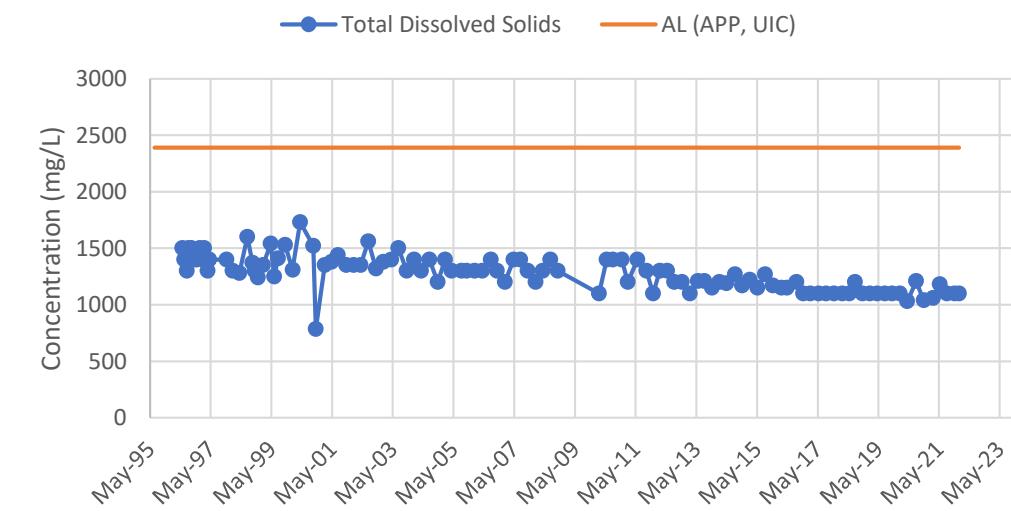


Figure 17c. Field pH

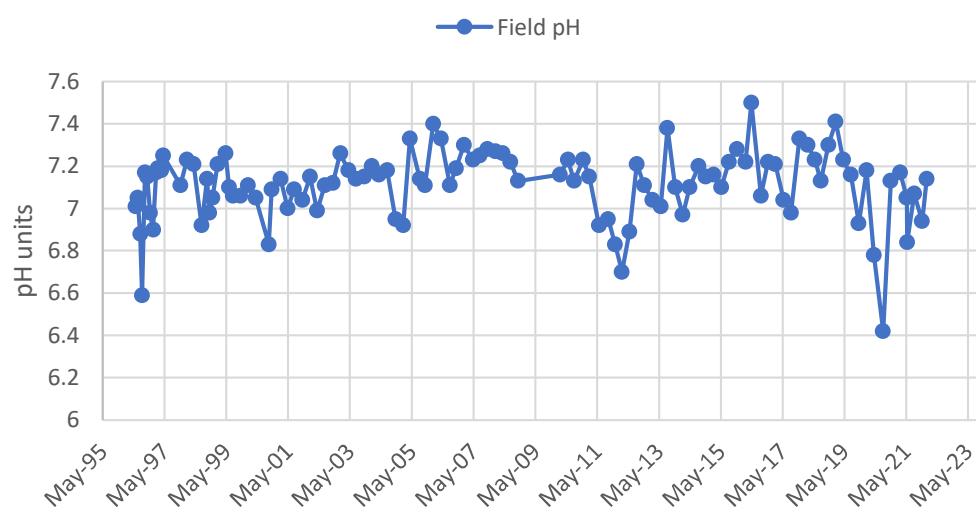
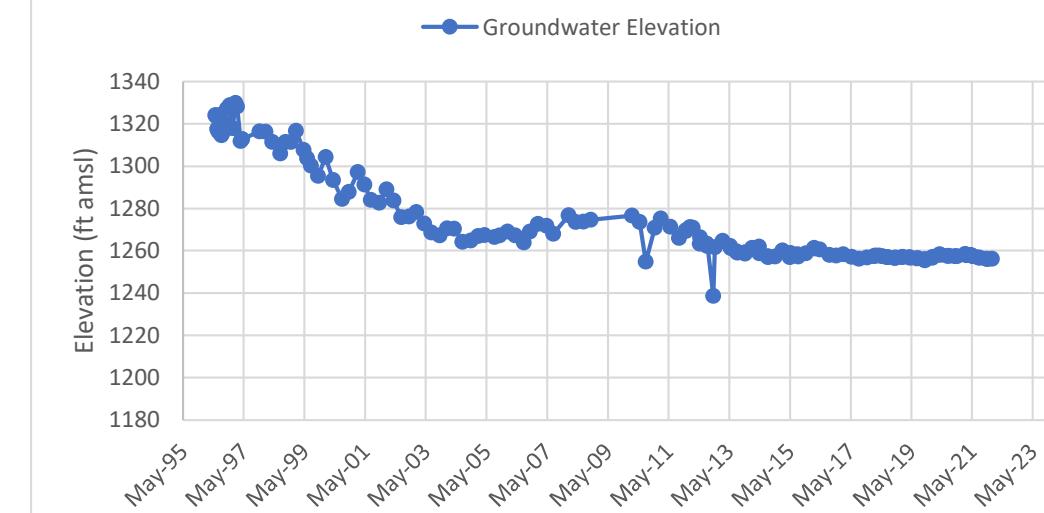


Figure 17d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

M24-O QUARTERLY CONCENTRATION GRAPHS

Figure 18a. Sulfate

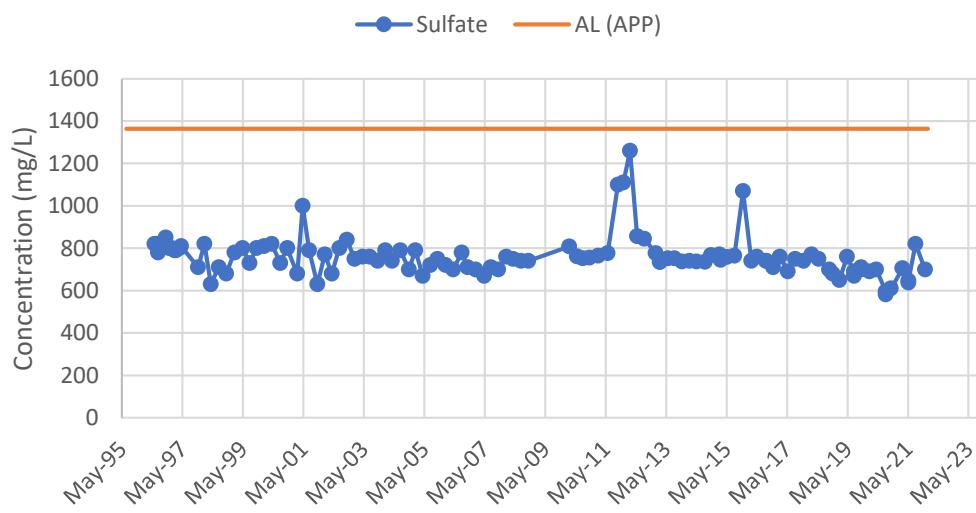


Figure 18b. Total Dissolved Solids

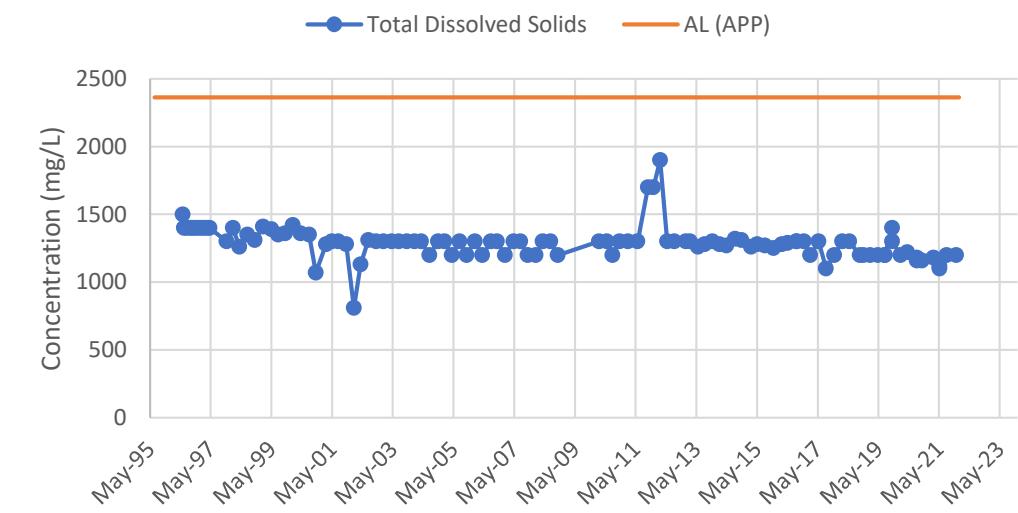


Figure 18c. Field pH

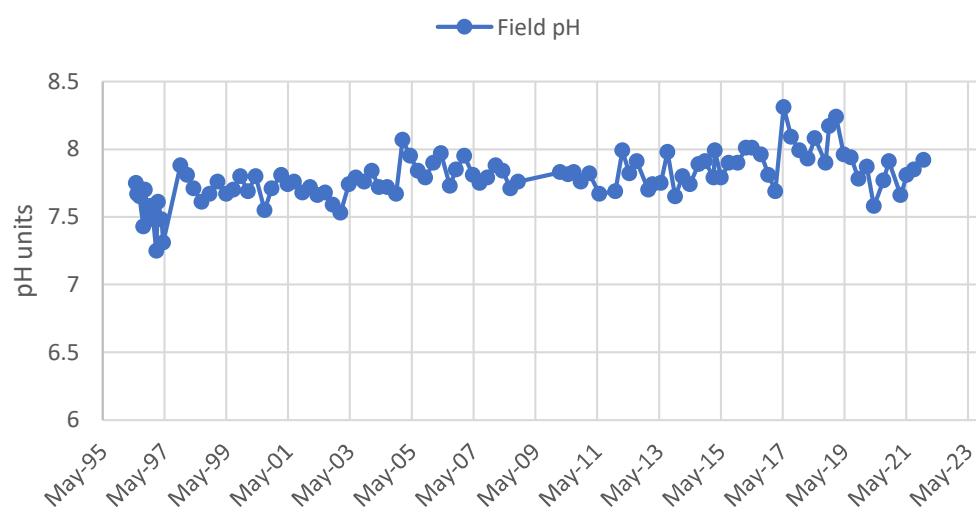
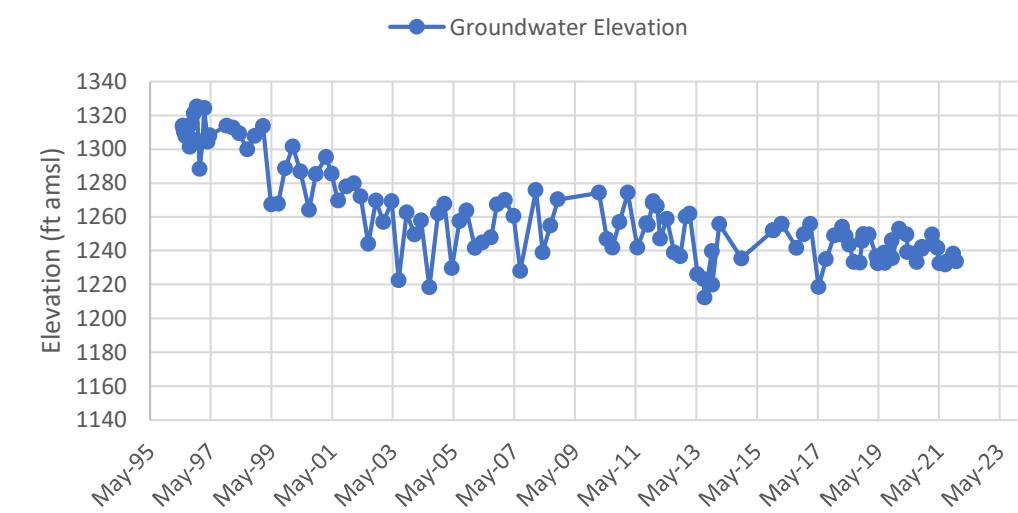


Figure 18d. Groundwater Elevation

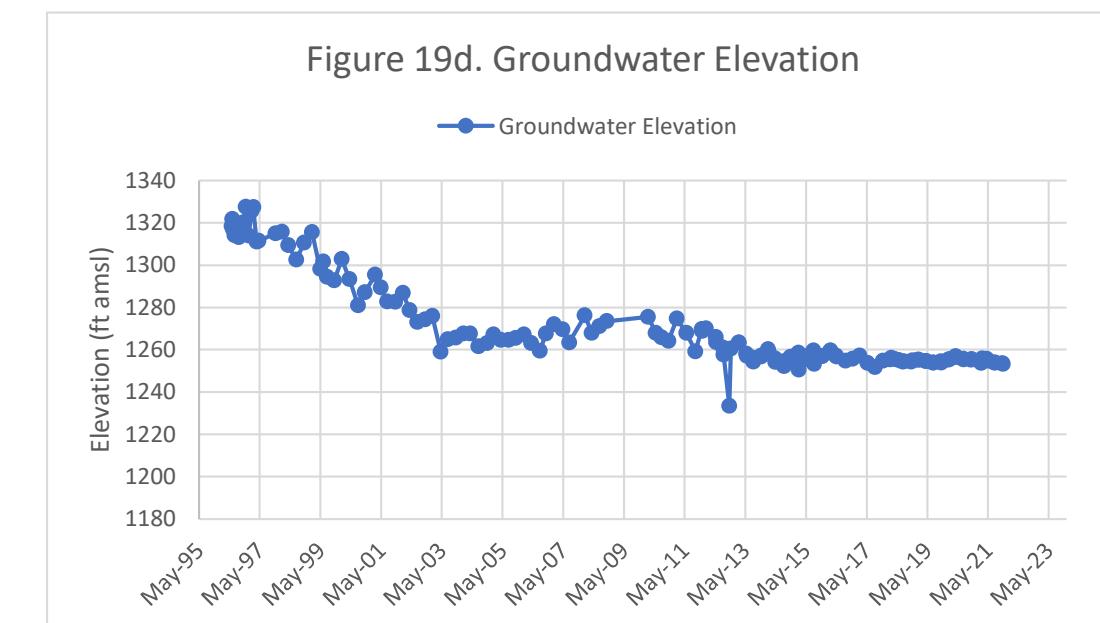
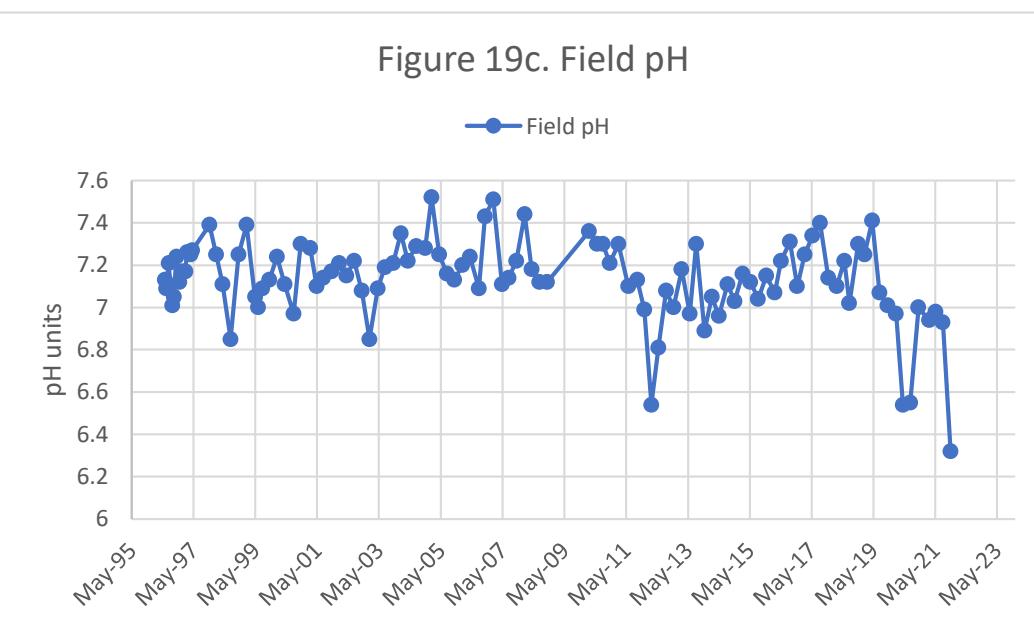
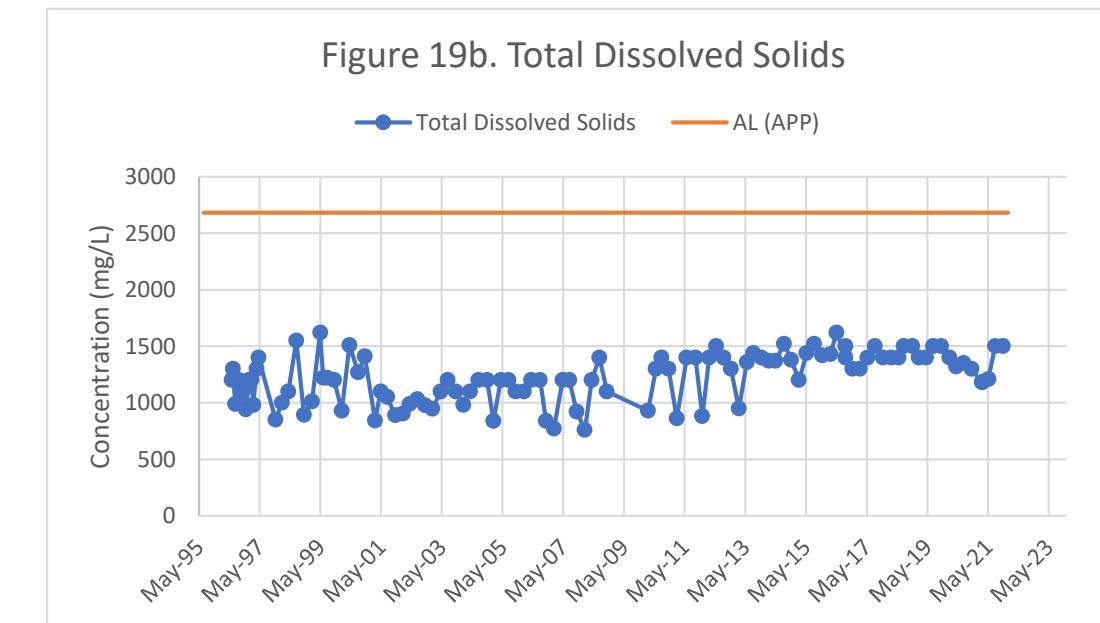
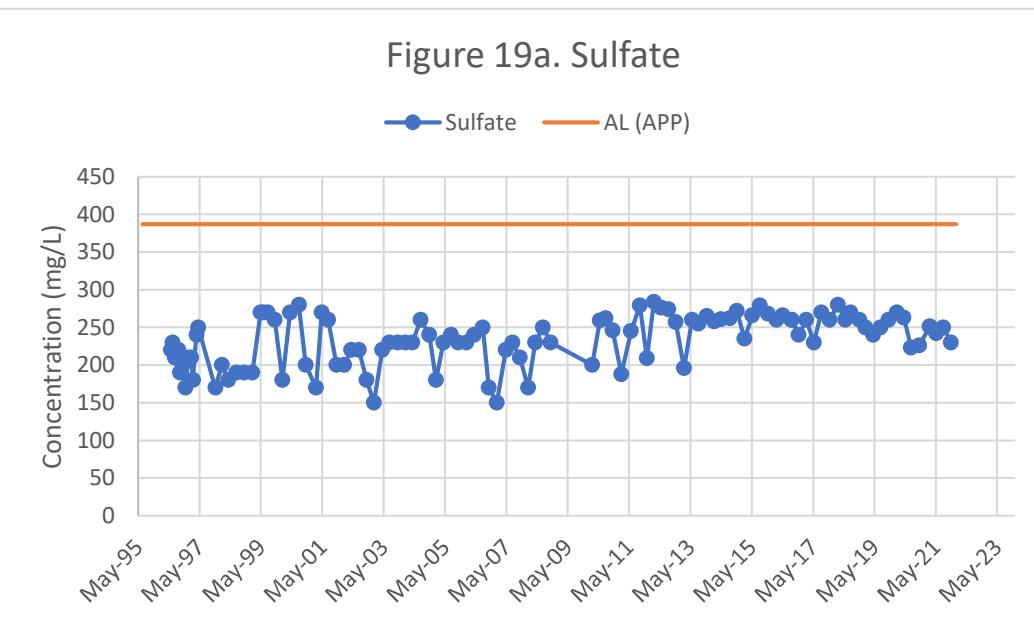


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M25-UBF QUARTERLY CONCENTRATION GRAPHS



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M26-O QUARTERLY CONCENTRATION GRAPHS

Figure 20a. Sulfate

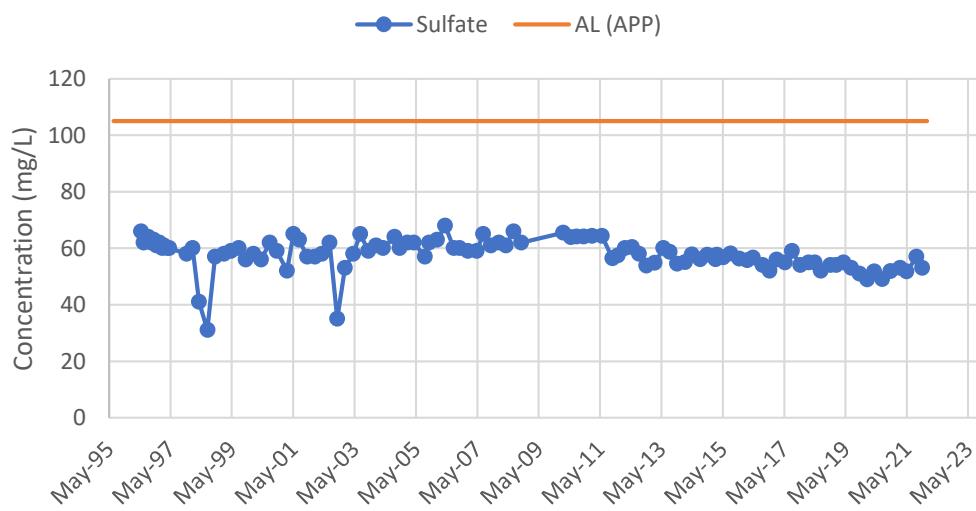


Figure 20b. Total Dissolved Solids

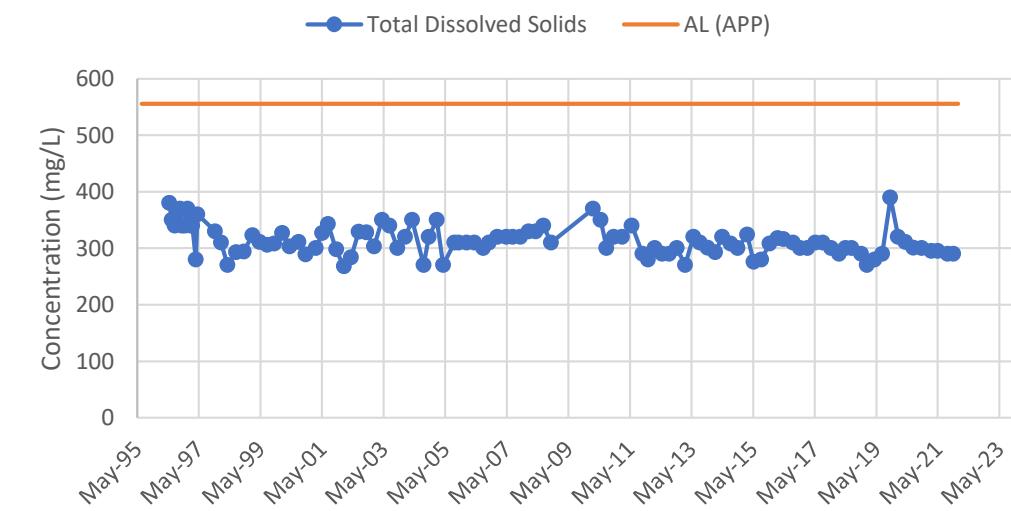


Figure 20c. Field pH

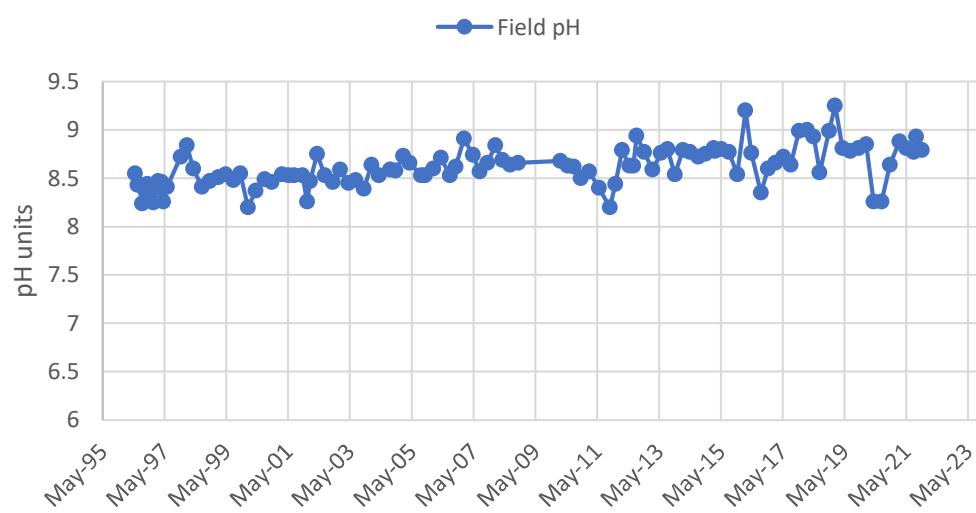
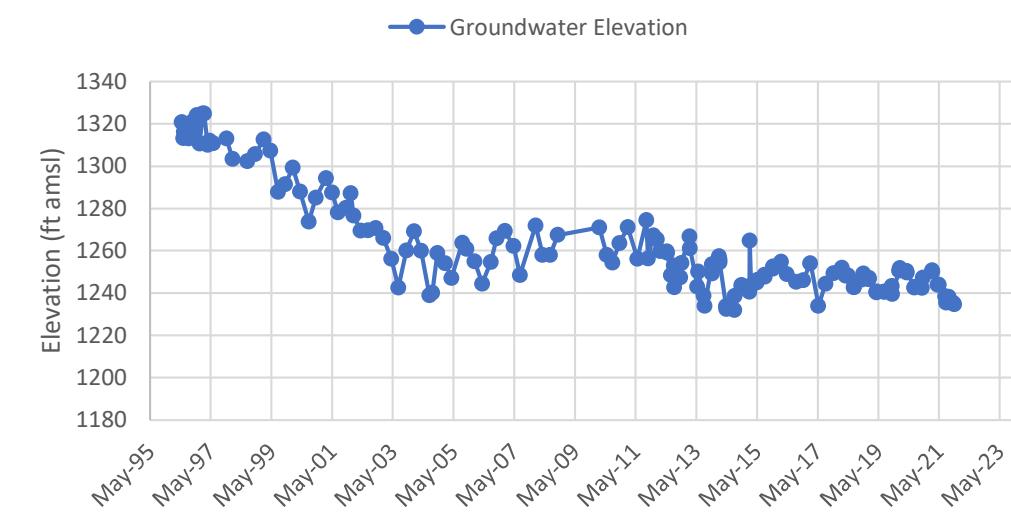


Figure 20d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M27-LBF QUARTERLY CONCENTRATION GRAPHS

Figure 21a. Sulfate

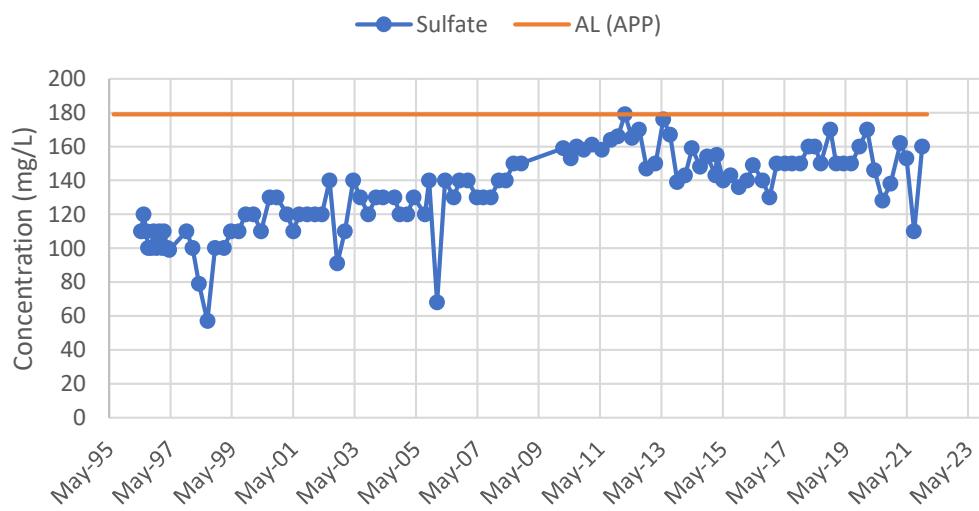


Figure 21b. Total Dissolved Solids

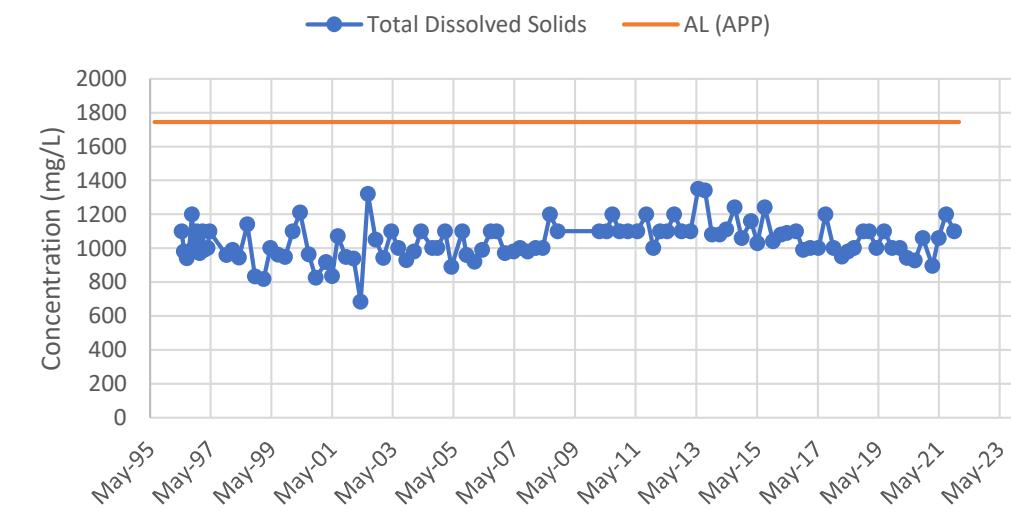


Figure 21c. Field pH

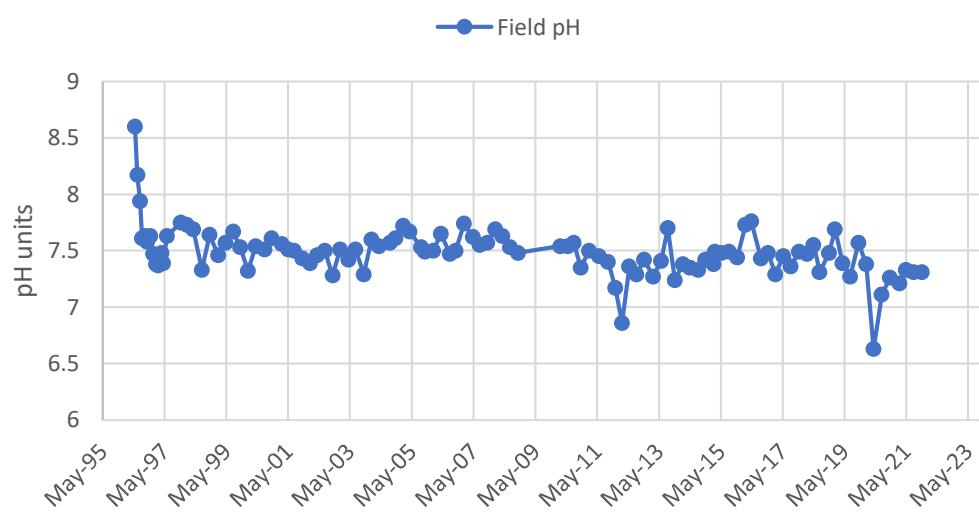
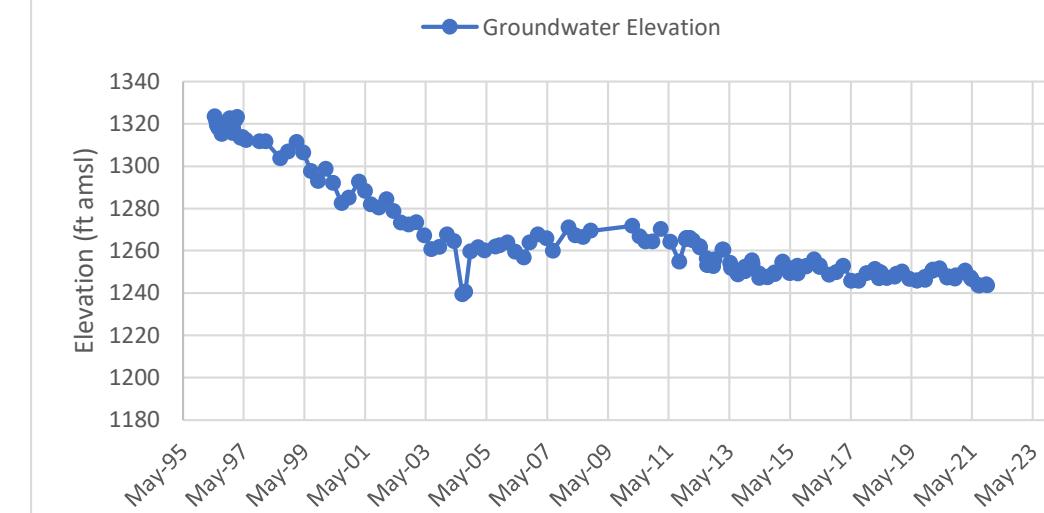


Figure 21d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M28-LBF QUARTERLY CONCENTRATION GRAPHS

Figure 22a. Sulfate

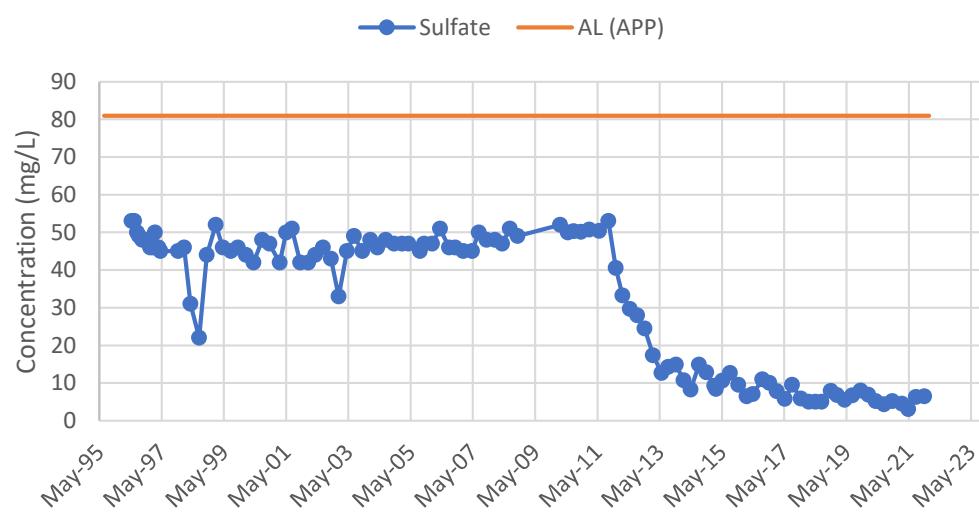


Figure 22b. Total Dissolved Solids

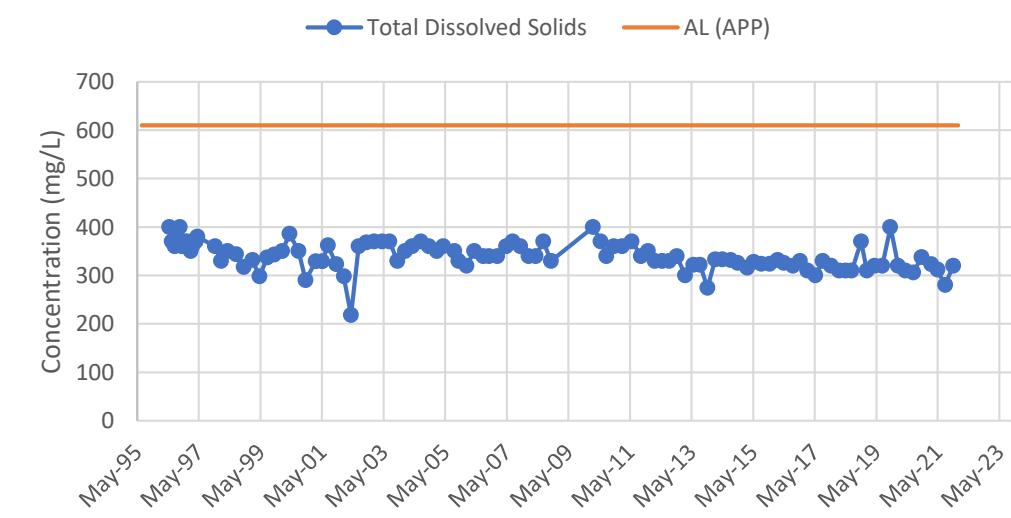


Figure 22c. Field pH

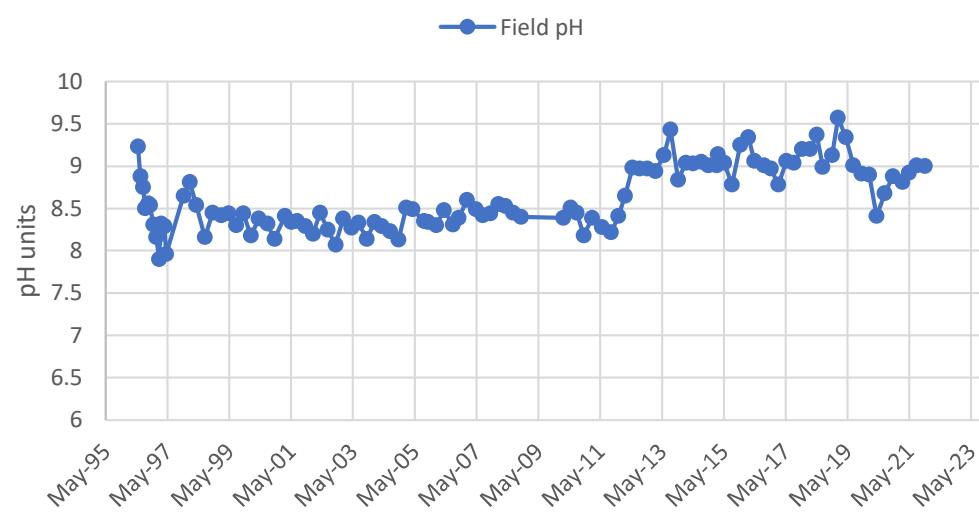
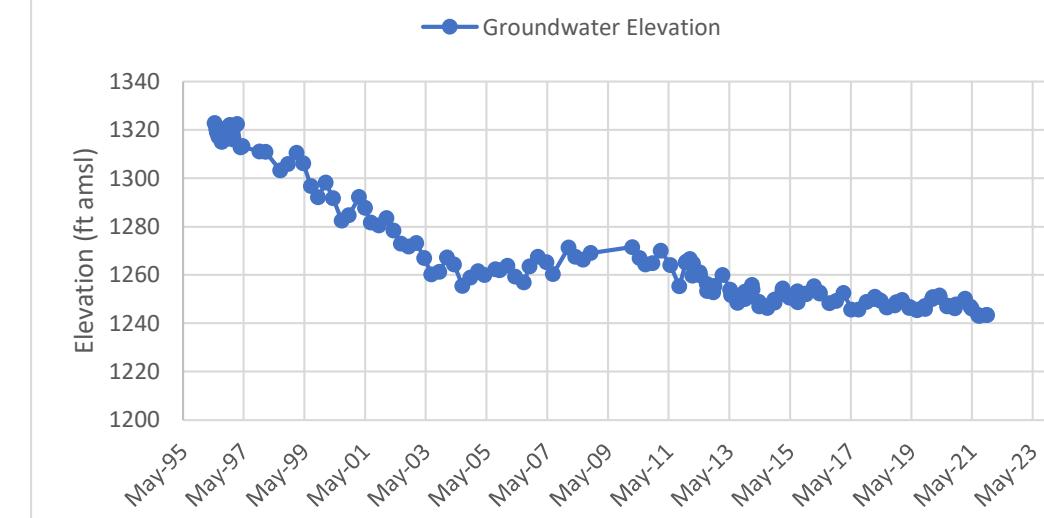


Figure 22d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M29-UBF QUARTERLY CONCENTRATION GRAPHS

Figure 23a. Sulfate

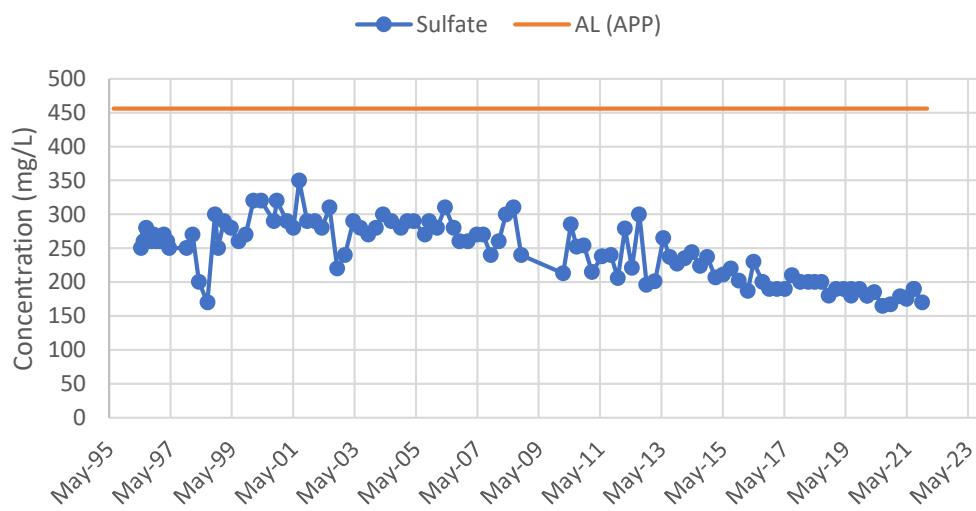


Figure 23b. Total Dissolved Solids

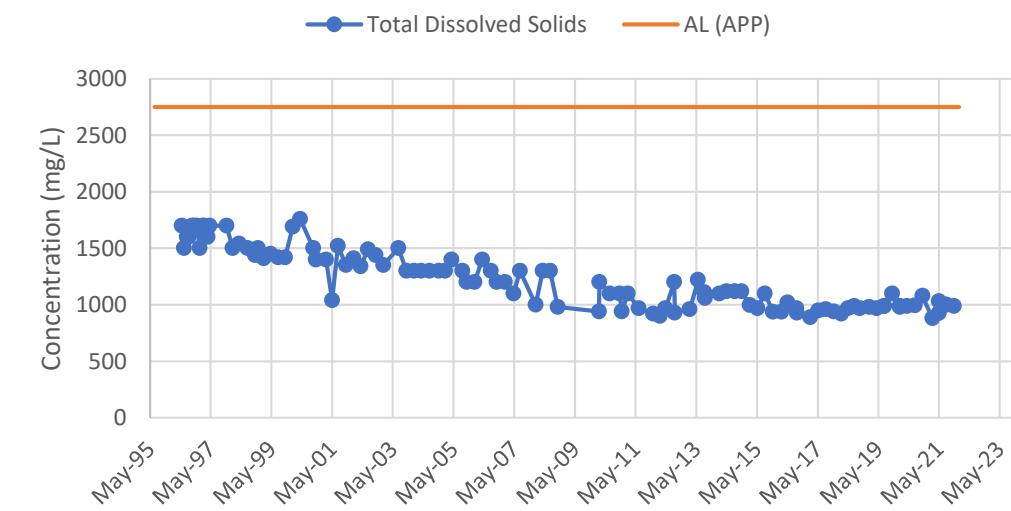


Figure 23c. Field pH

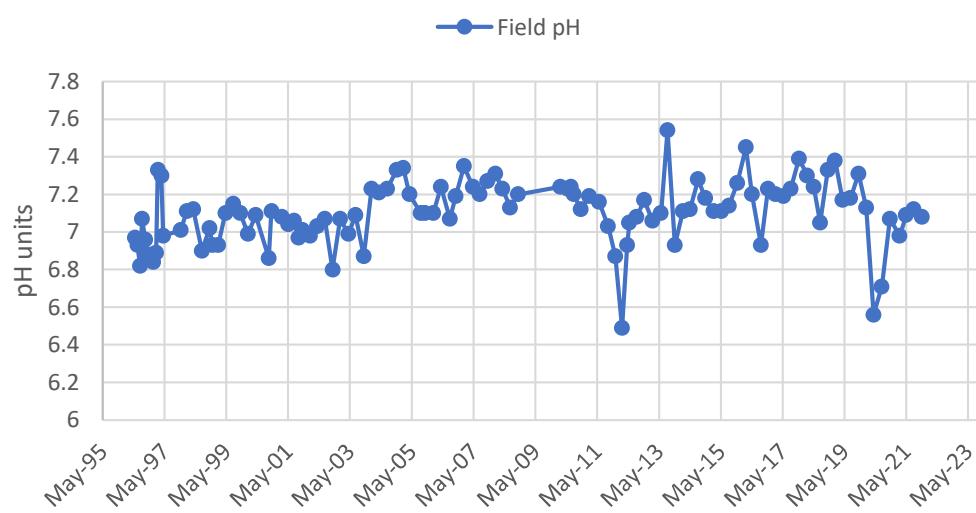
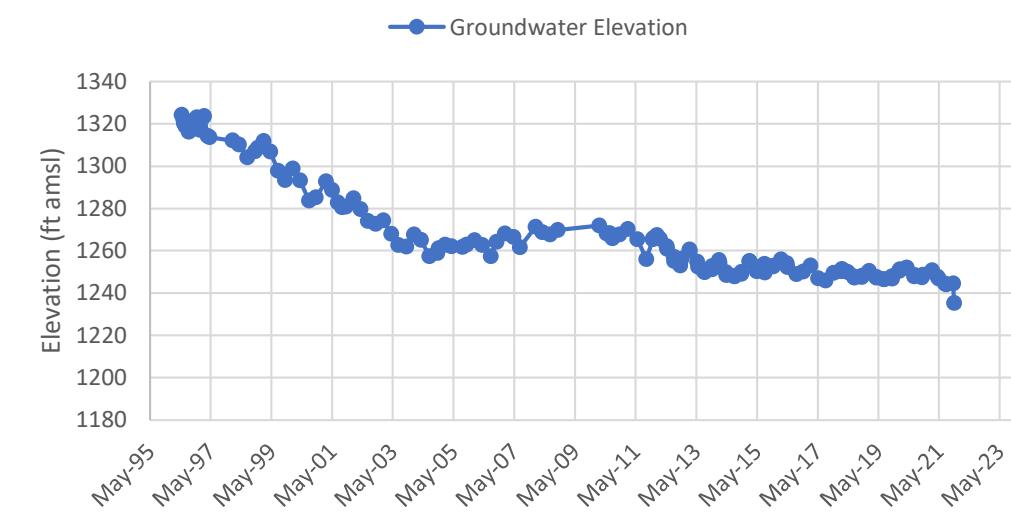


Figure 23d. Groundwater Elevation



Notes:

Historical outliers removed from graphs for visual representation, but are maintained in the dataset.

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M30-O QUARTERLY CONCENTRATION GRAPHS

Figure 24a. Sulfate

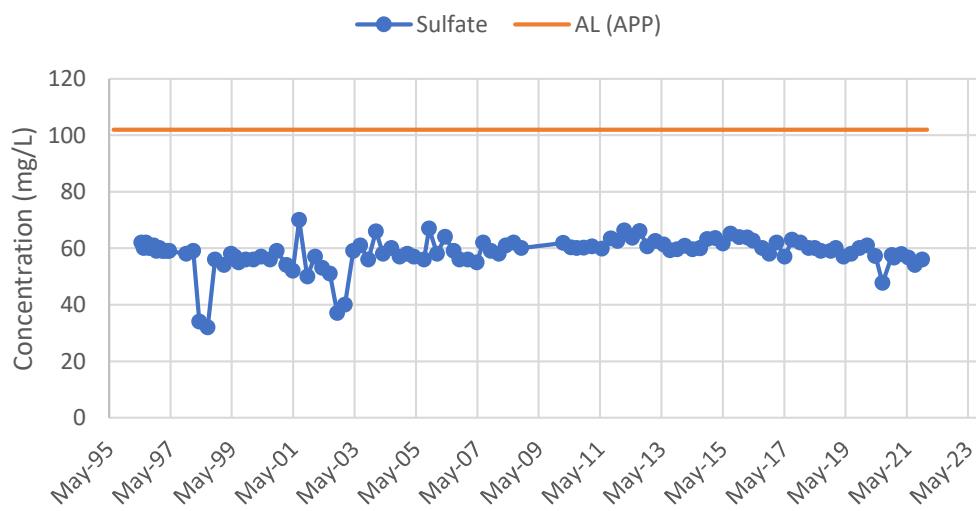


Figure 24b. Total Dissolved Solids

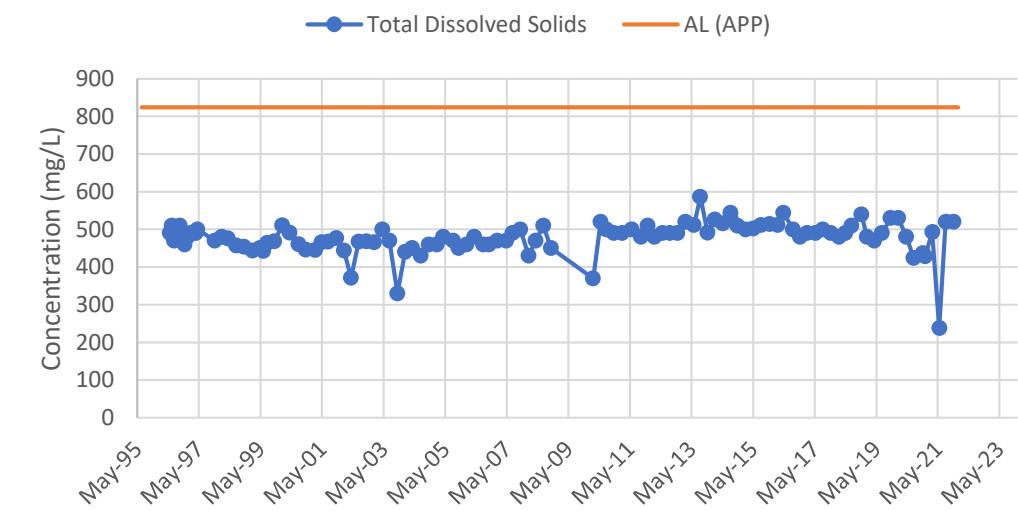


Figure 24c. Field pH

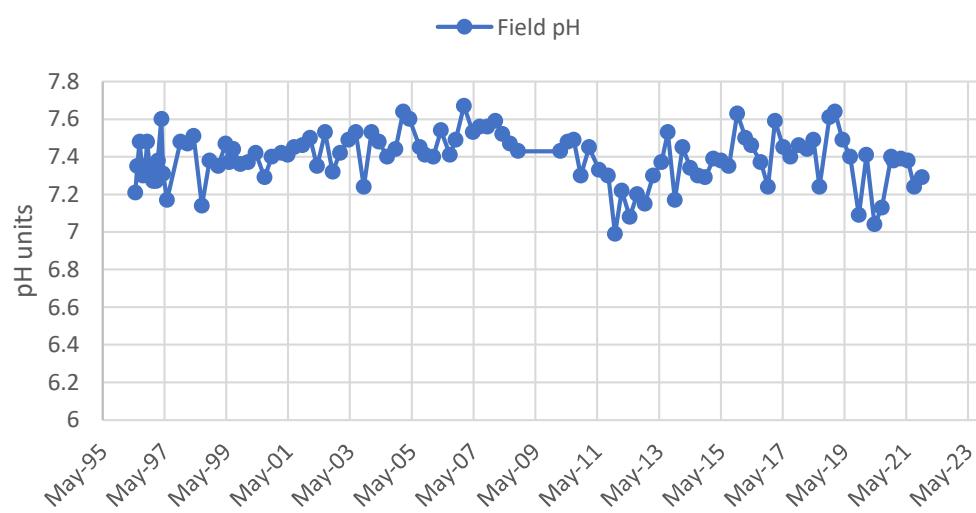
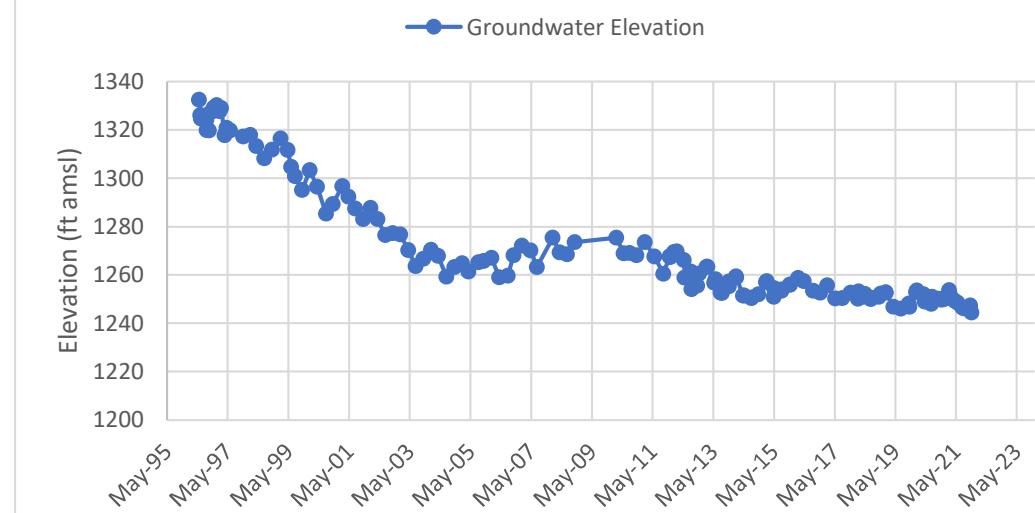


Figure 24d. Groundwater Elevation

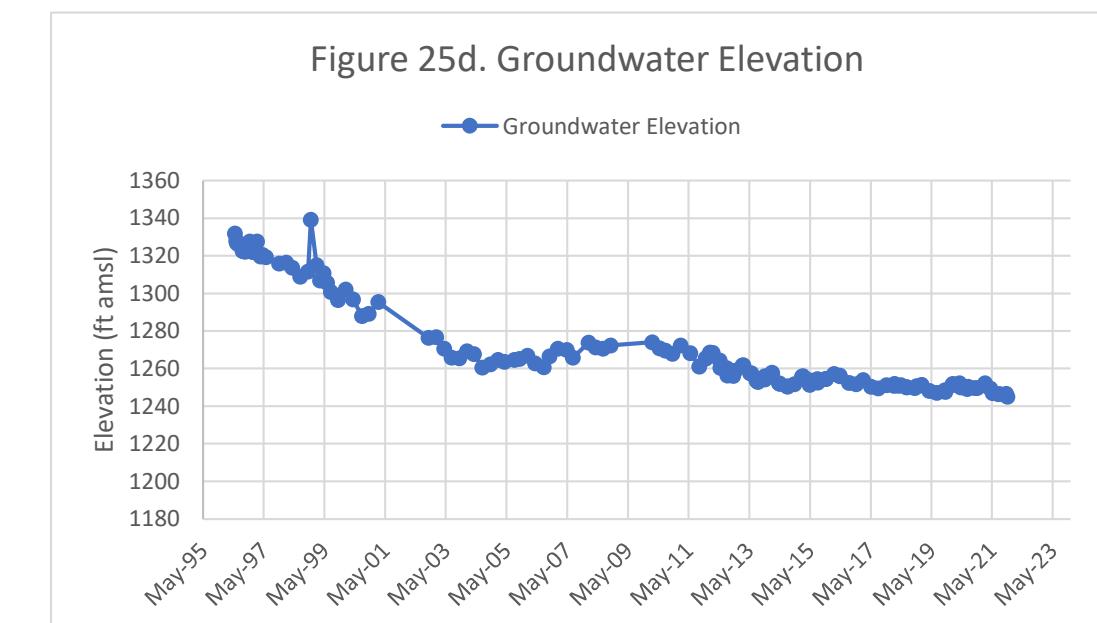
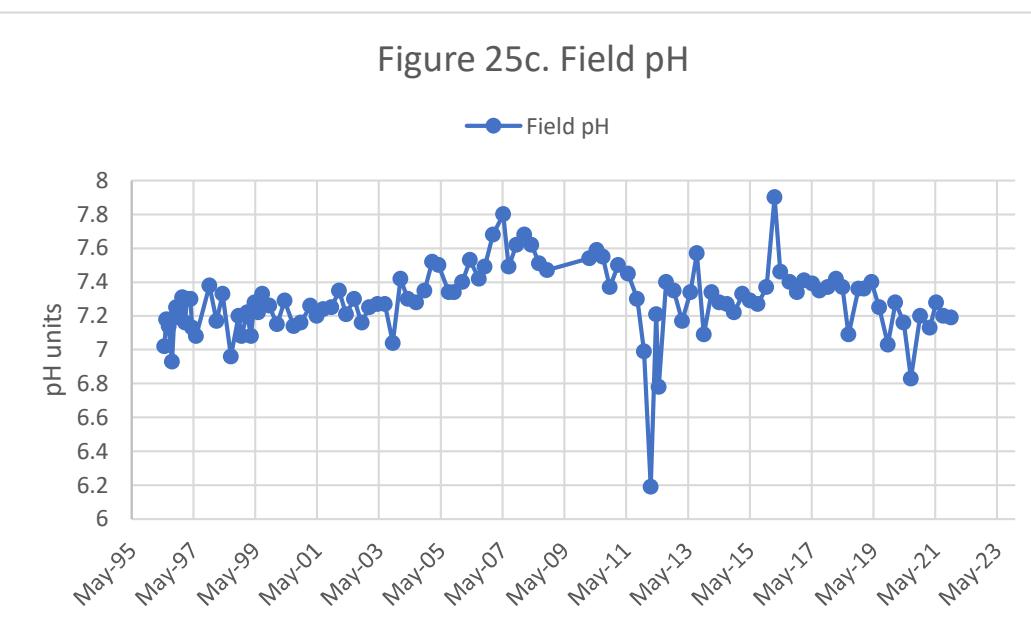
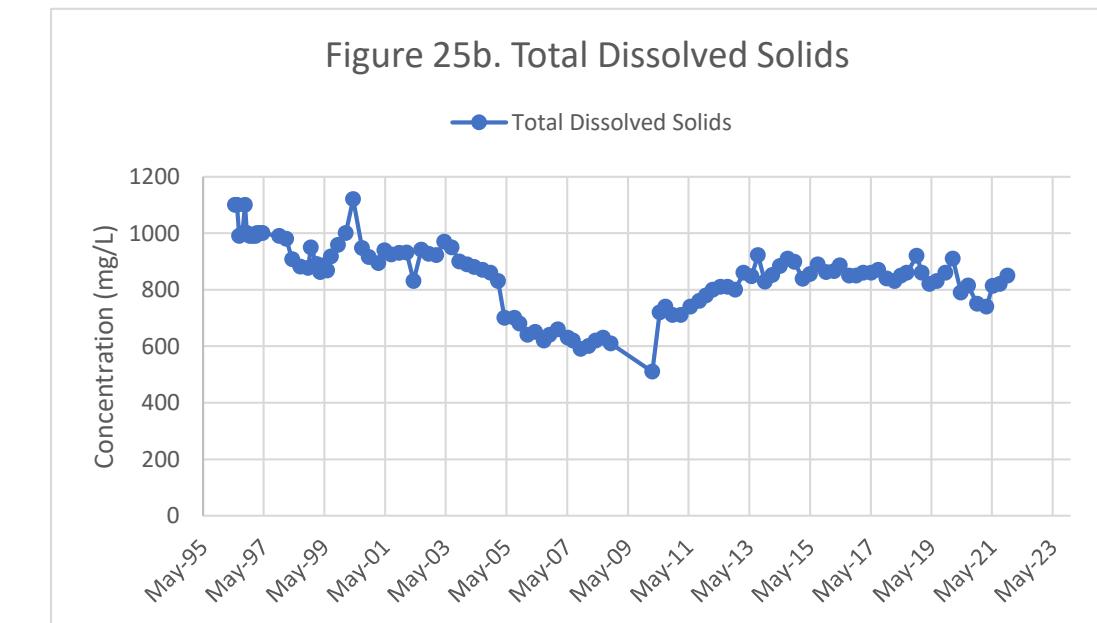
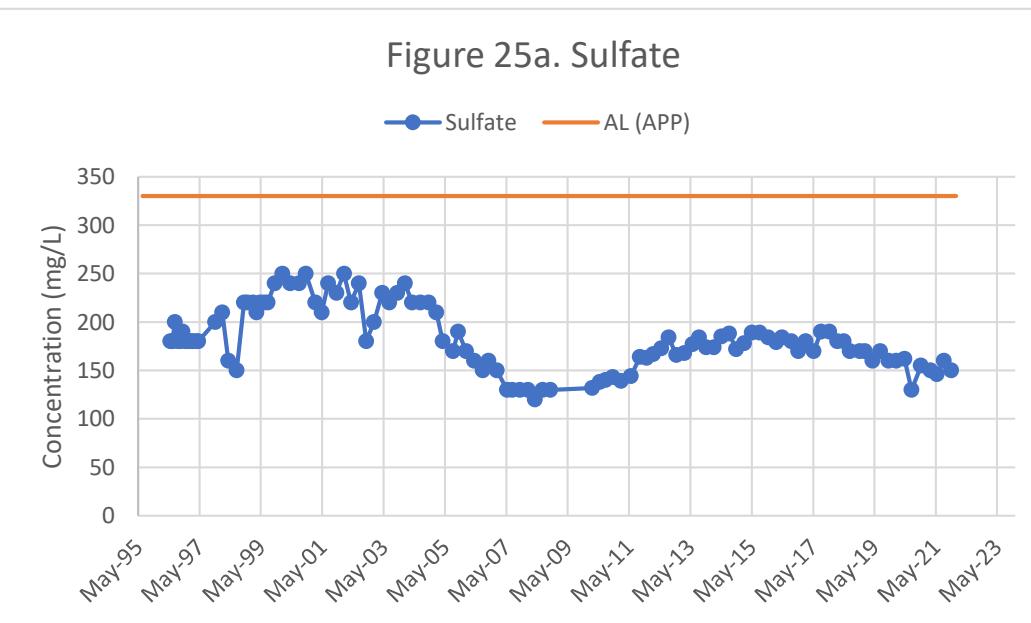


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M31-LBF QUARTERLY CONCENTRATION GRAPHS



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M32-UBF QUARTERLY CONCENTRATION GRAPHS

Figure 26a. Sulfate

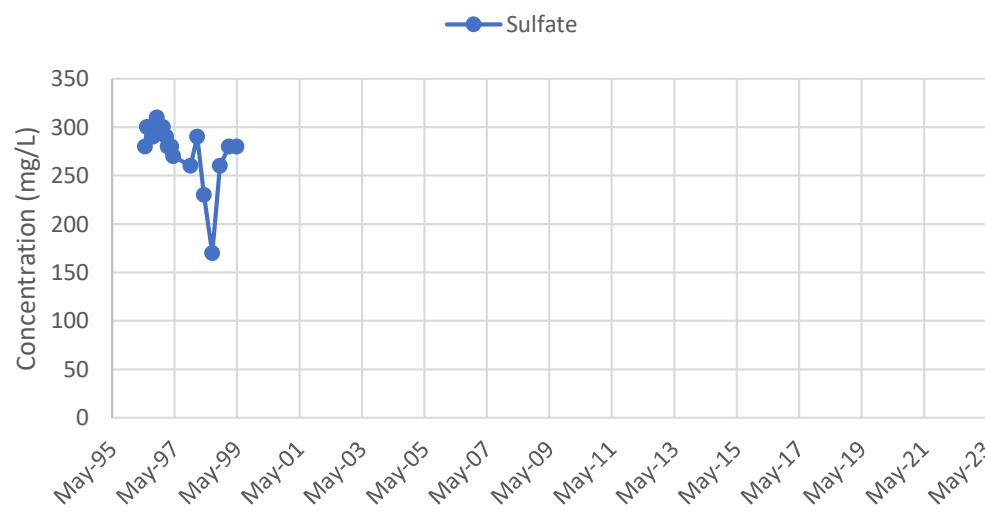


Figure 26b. Total Dissolved Solids

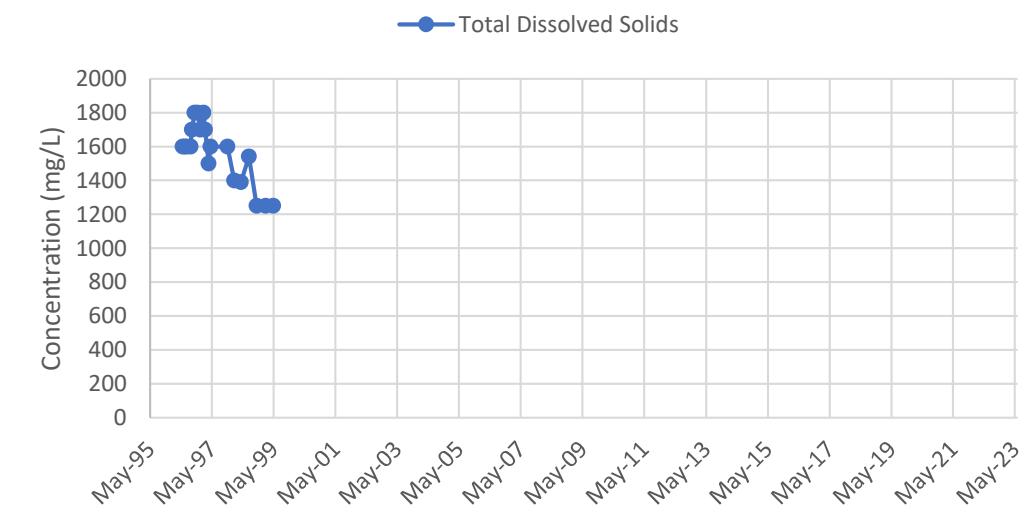


Figure 26c. Field pH

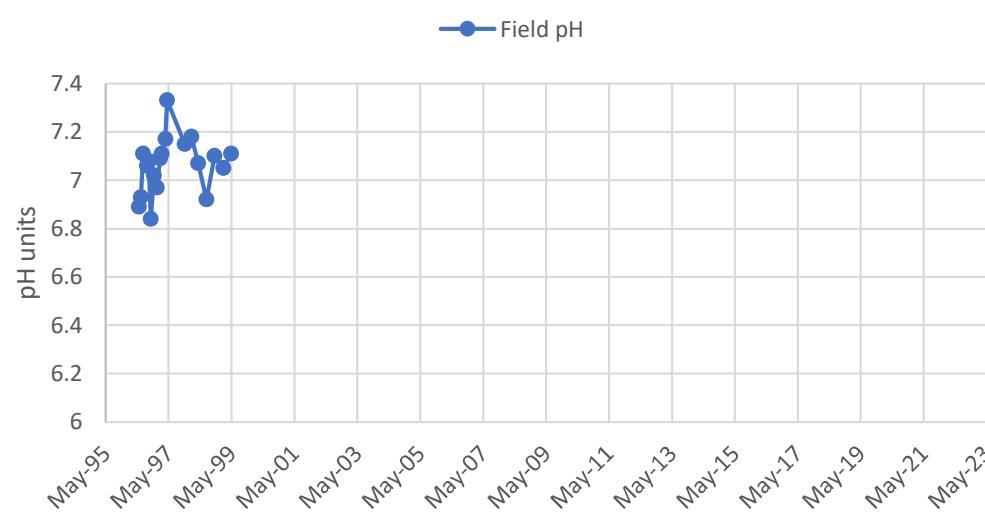
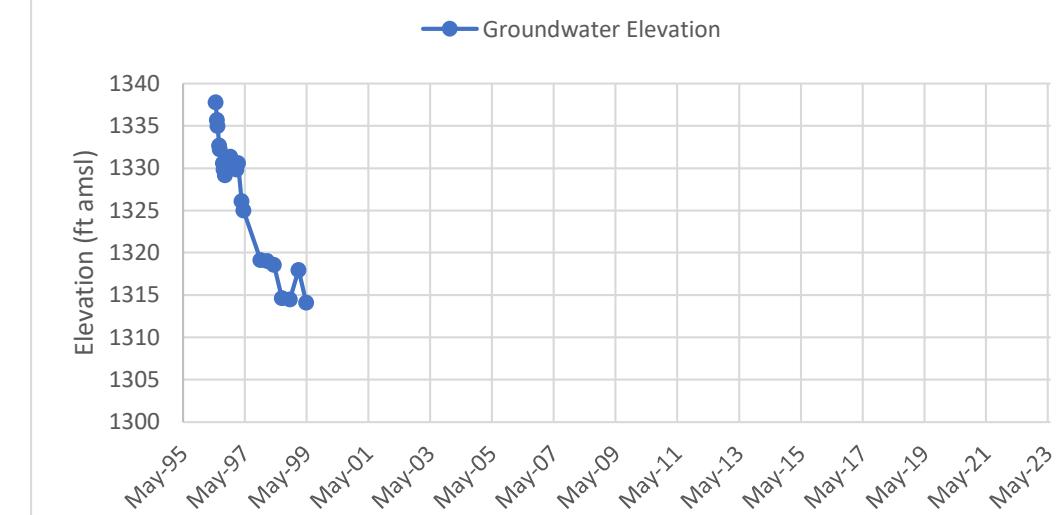


Figure 26d. Groundwater Elevation



Notes:

M32-UBF has been historically dry

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M33-UBF QUARTERLY CONCENTRATION GRAPHS

Figure 27a. Sulfate

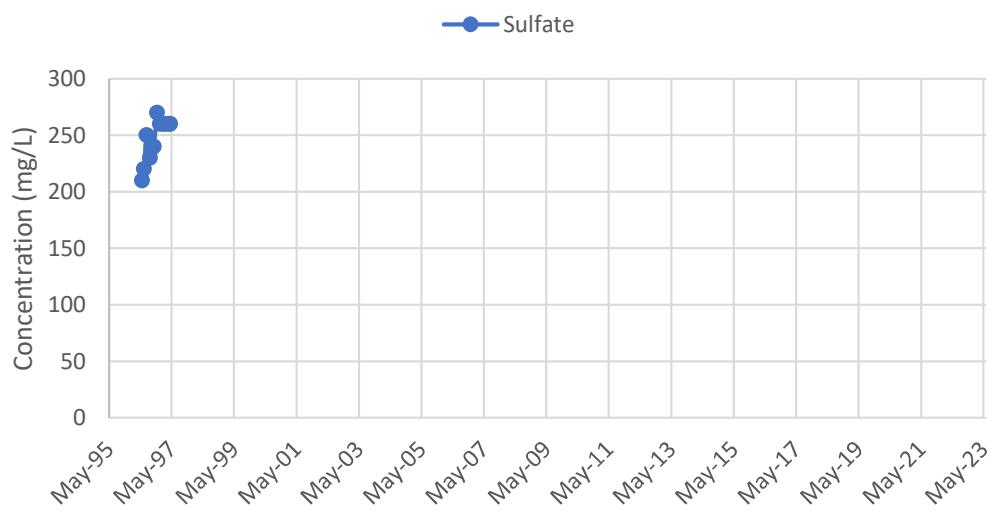


Figure 27b. Total Dissolved Solids

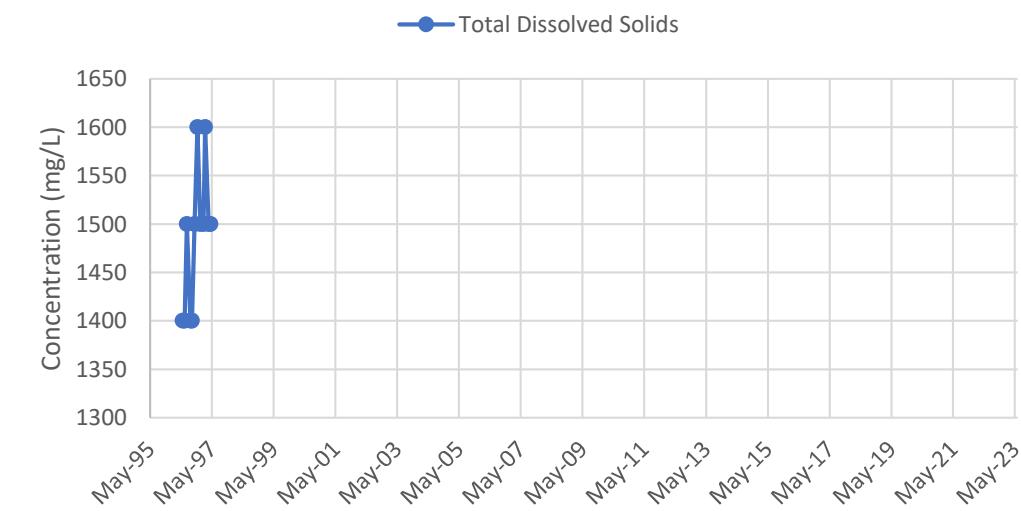


Figure 27c. Field pH

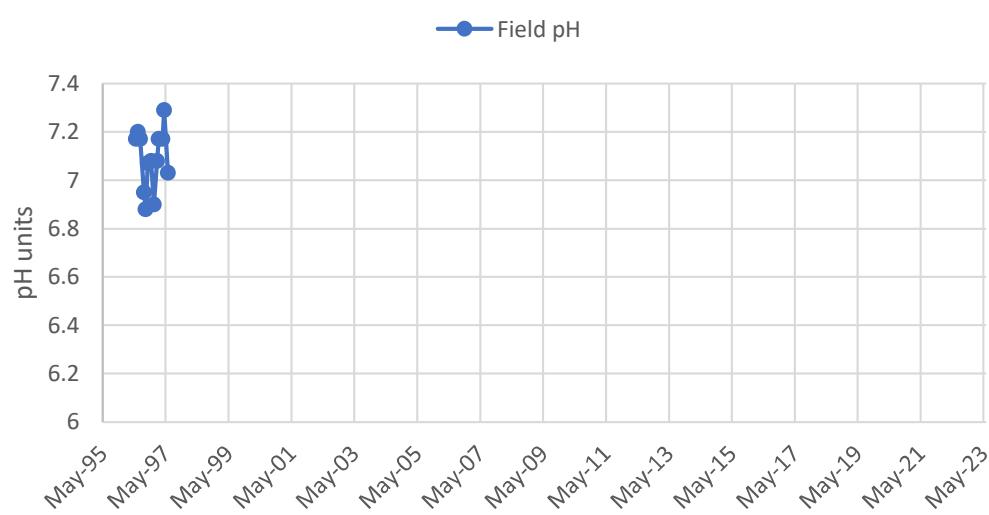
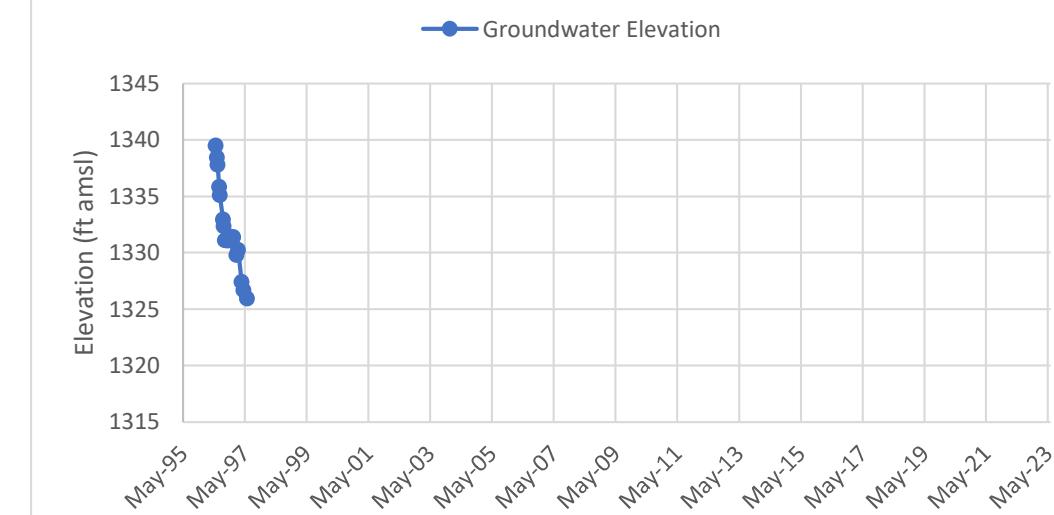


Figure 27d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

M52-UBF QUARTERLY CONCENTRATION GRAPHS

Figure 28a. Sulfate

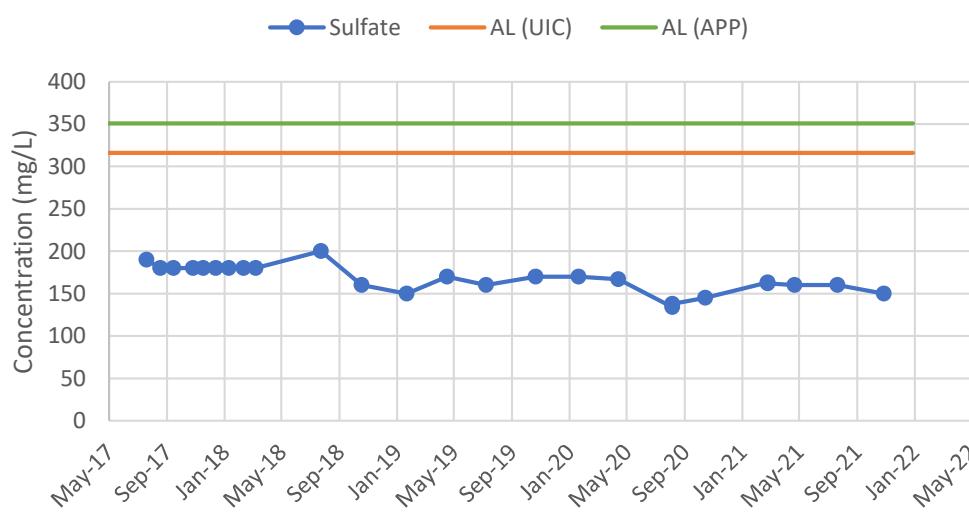


Figure 28b. Total Dissolved Solids

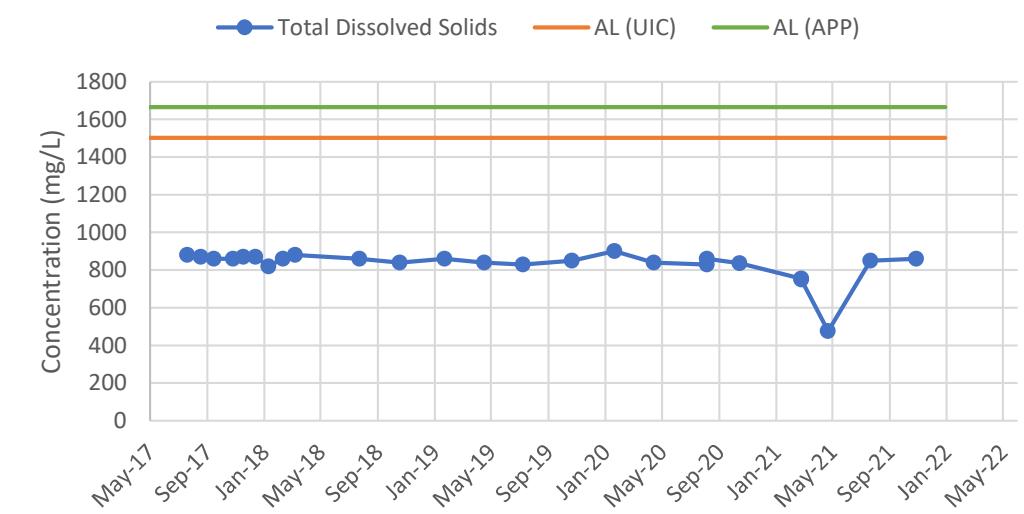


Figure 28c. Field pH

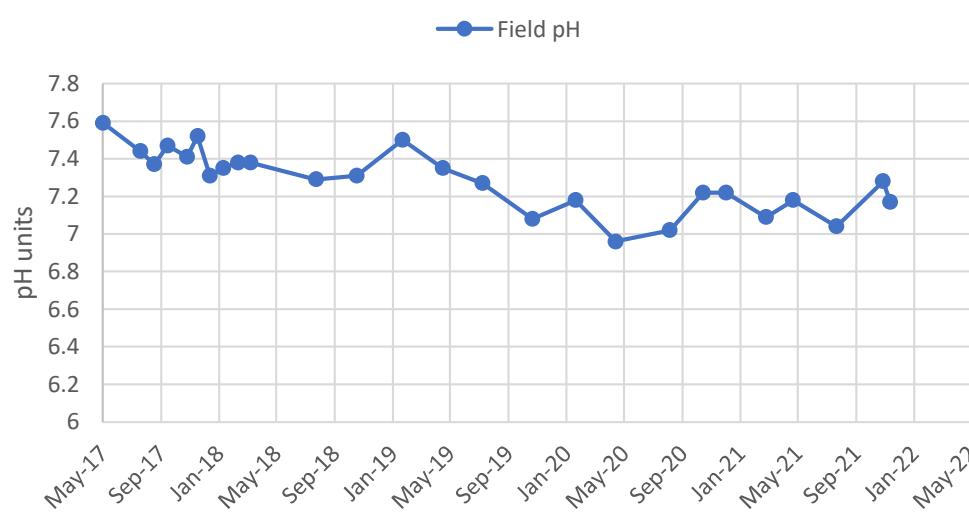
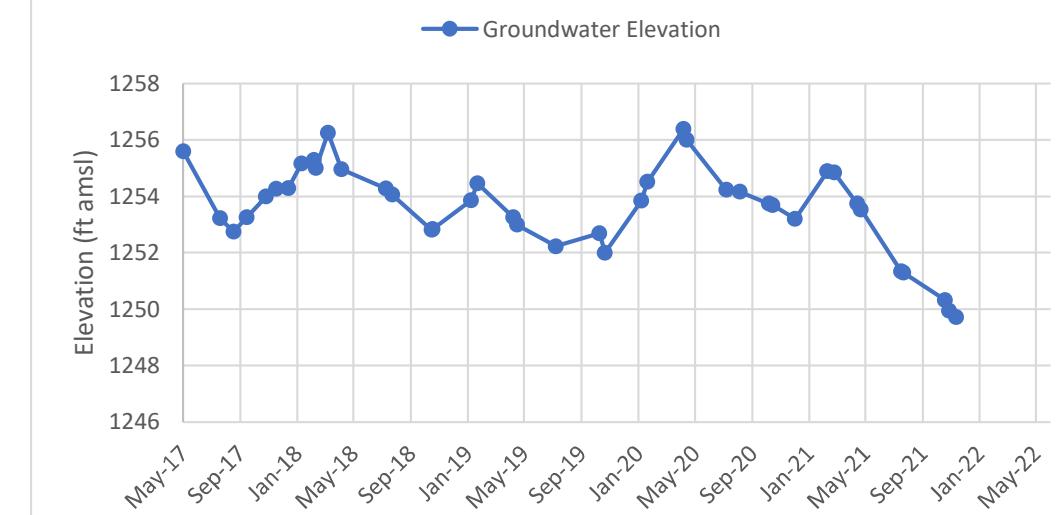


Figure 28d. Groundwater Elevation



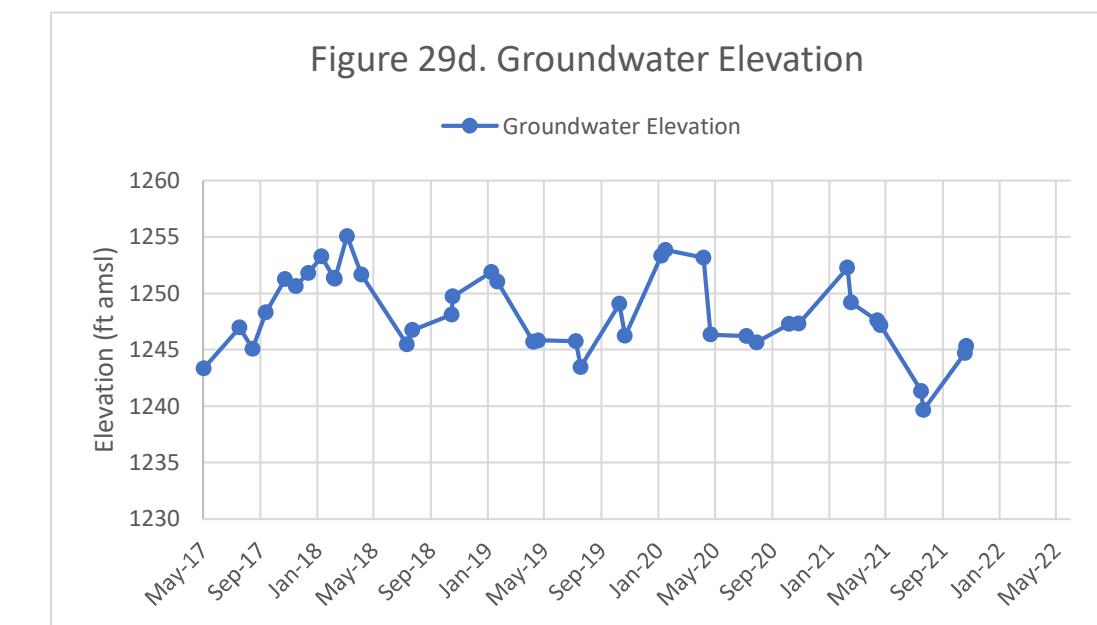
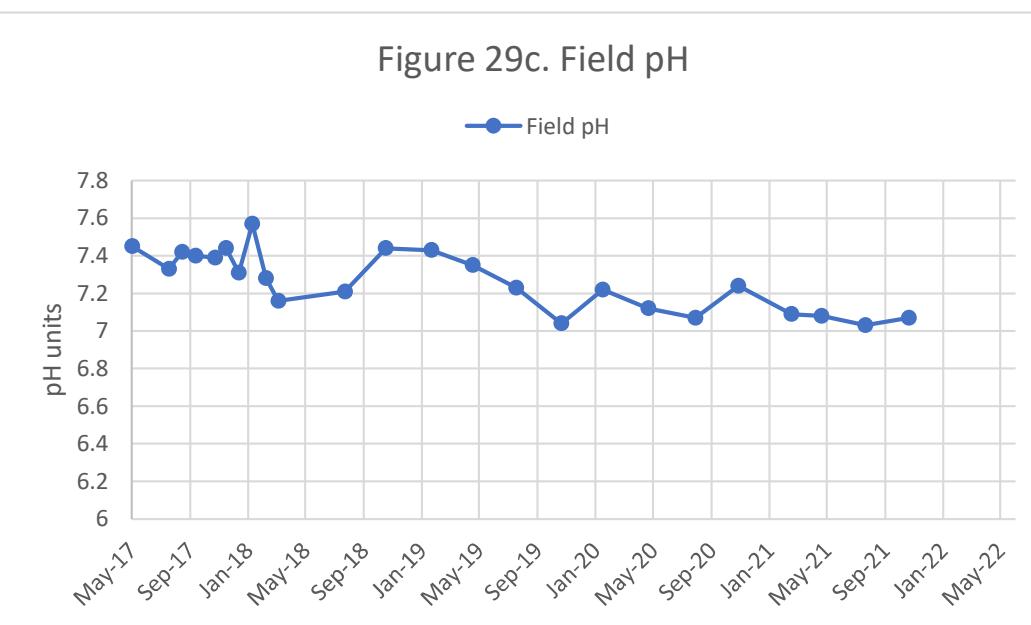
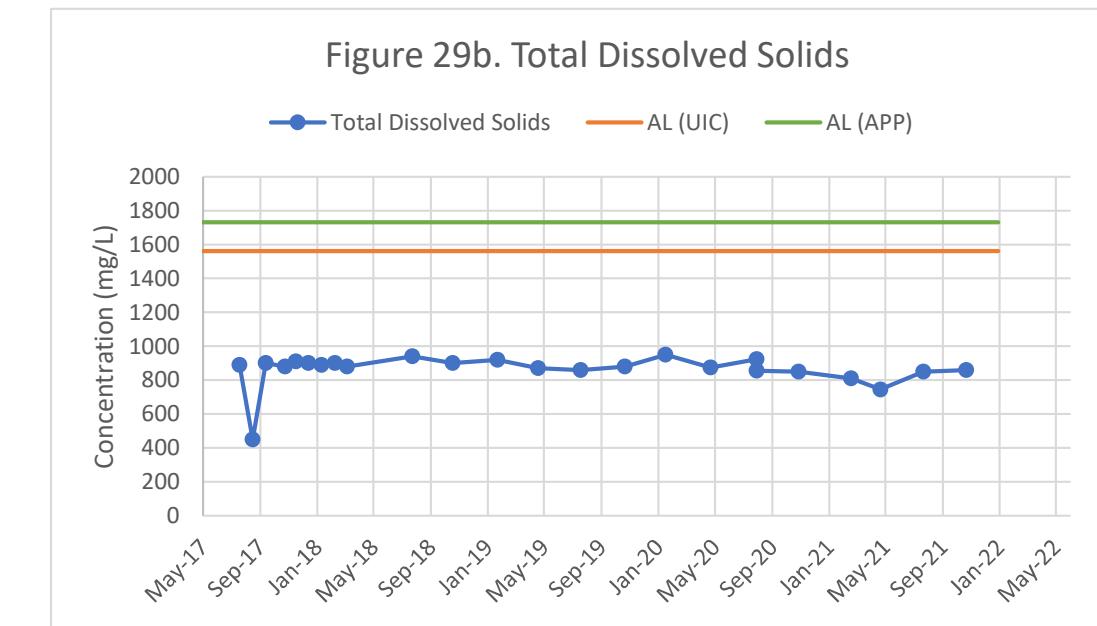
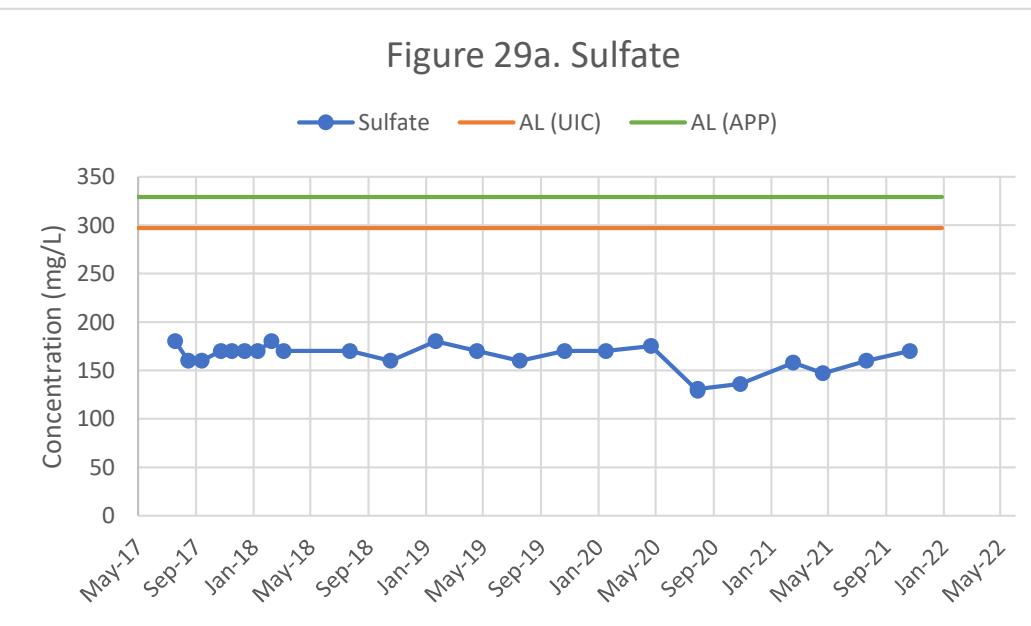
Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

M54-LBF QUARTERLY CONCENTRATION GRAPHS



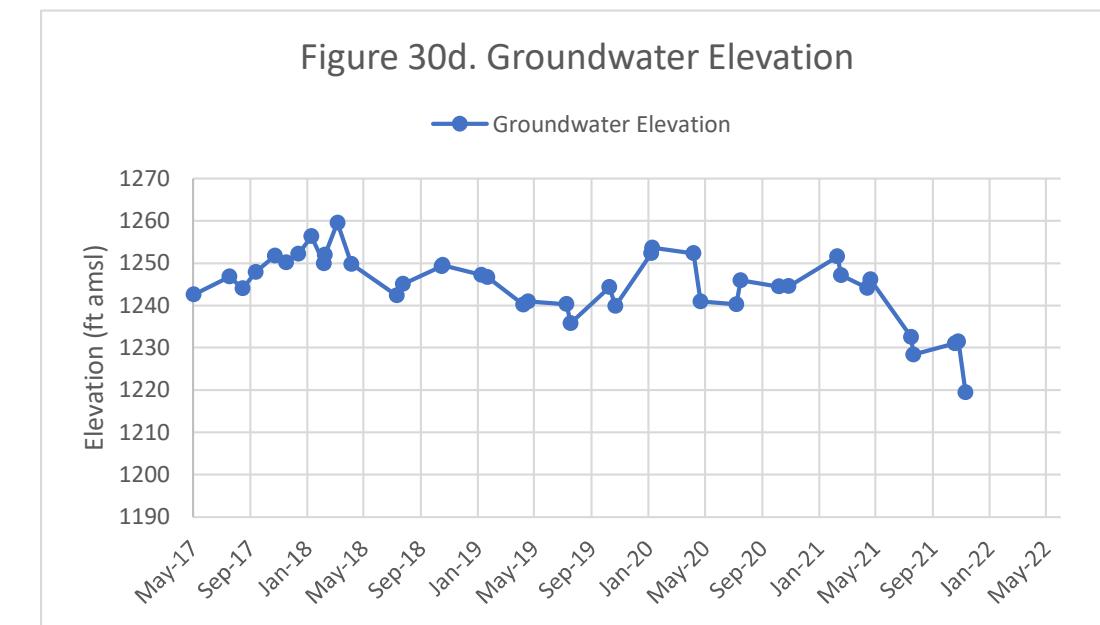
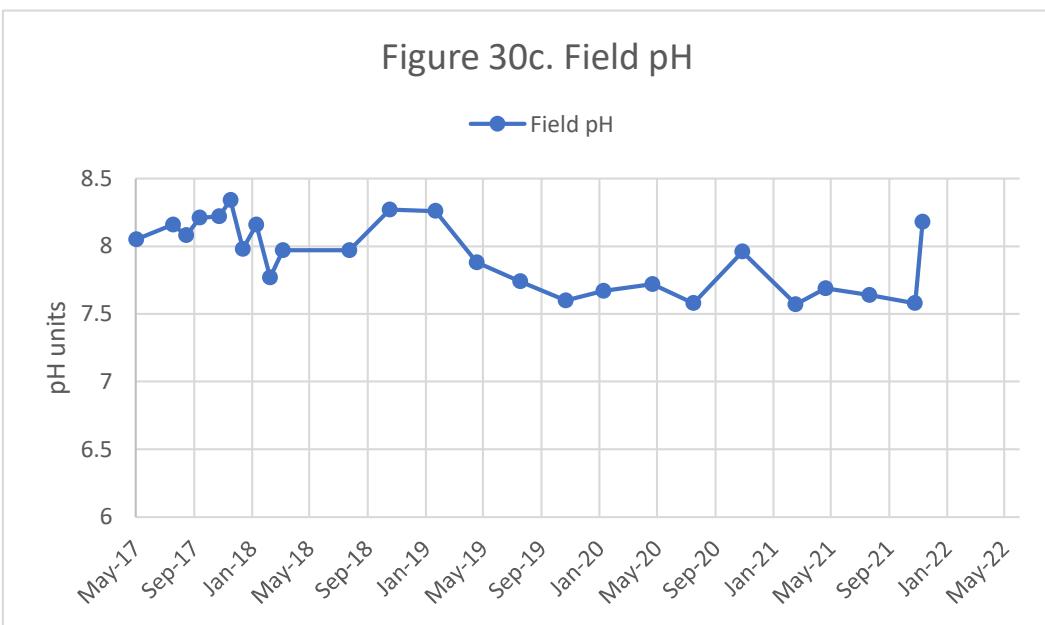
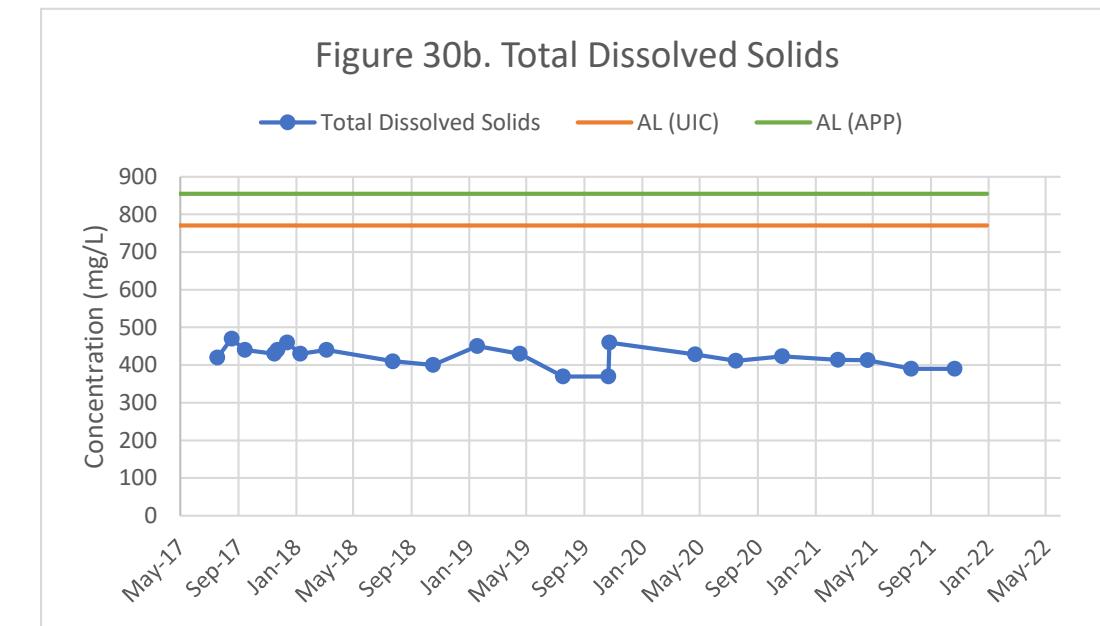
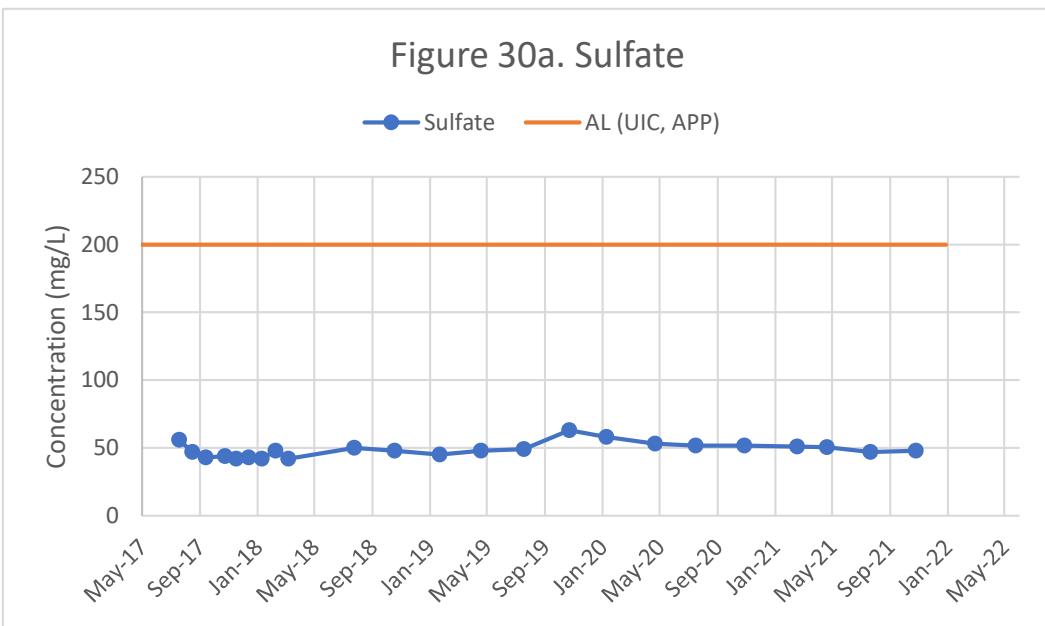
Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

M54-O QUARTERLY CONCENTRATION GRAPHS



Notes:

Historical outliers removed from graphs for visual representation, but are maintained in the dataset.

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

UIC = Underground Injection Control Permit No. R9UIC-AZ3-FY11-1

O19-GL QUARTERLY CONCENTRATION GRAPHS

Figure 31a. Sulfate

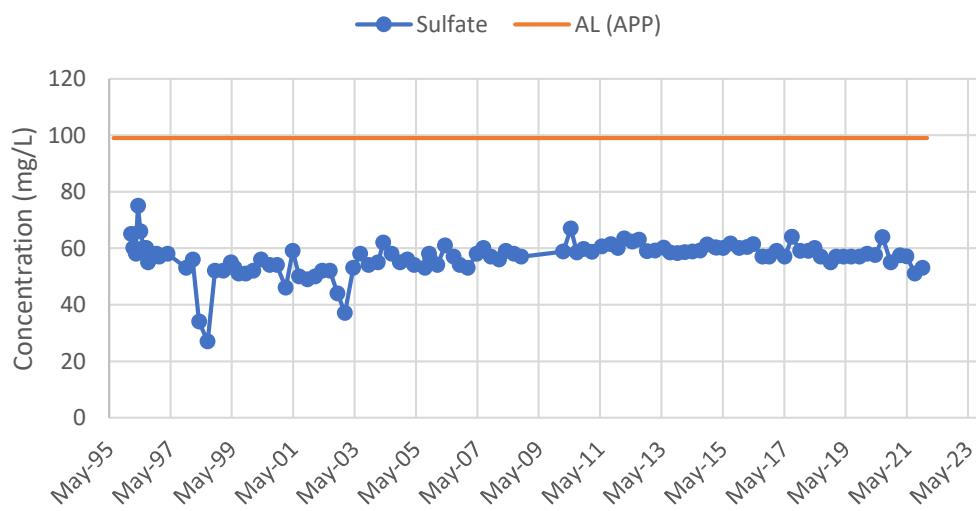


Figure 31b. Total Dissolved Solids

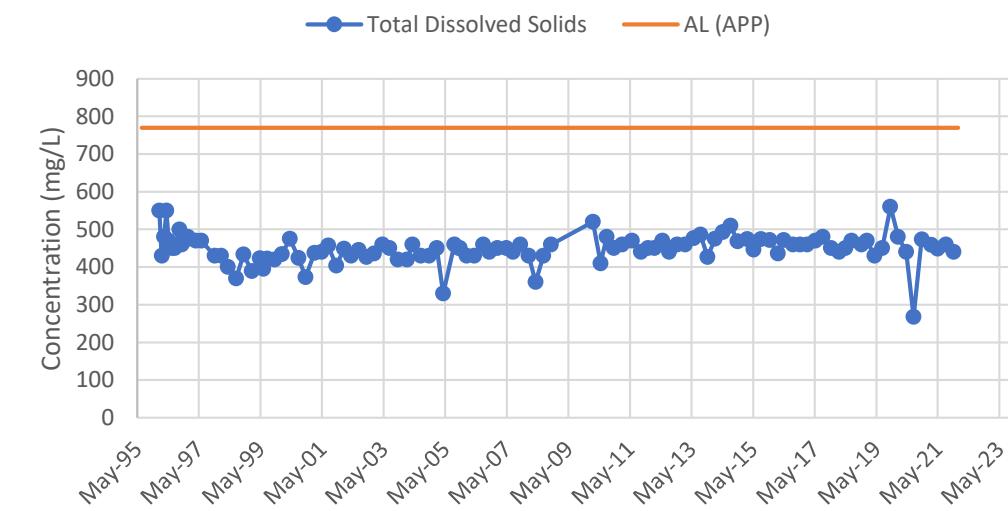


Figure 31c. Field pH

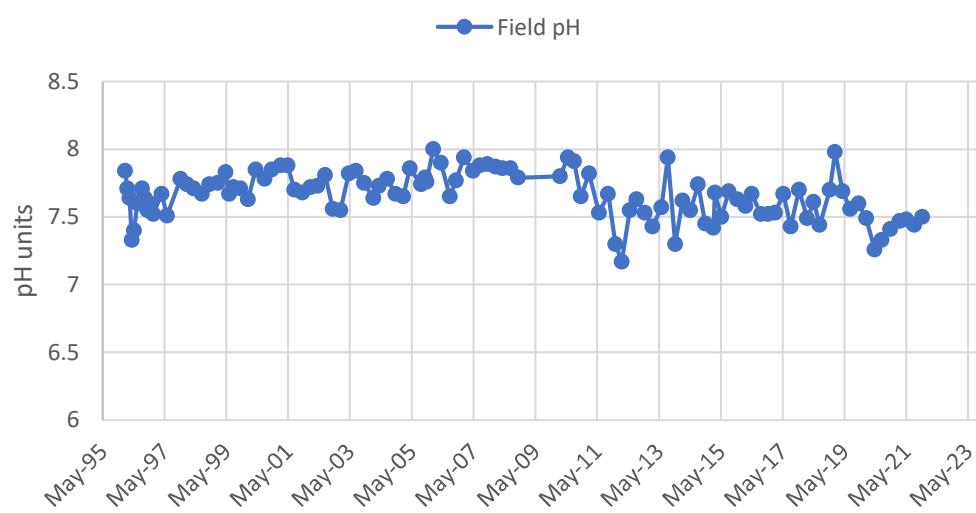
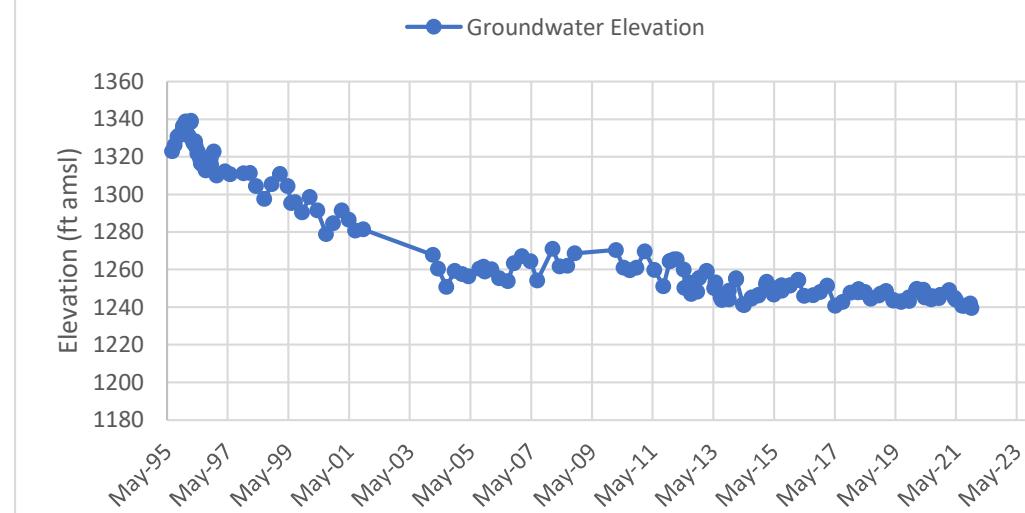


Figure 31d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

O49-GL(R) QUARTERLY CONCENTRATION GRAPHS

Figure 32a. Sulfate

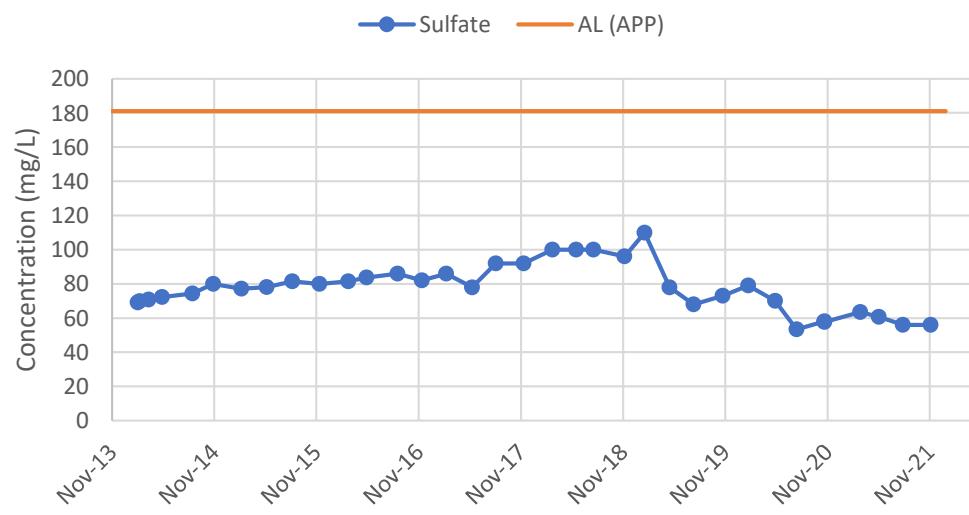


Figure 32b. Total Dissolved Solids

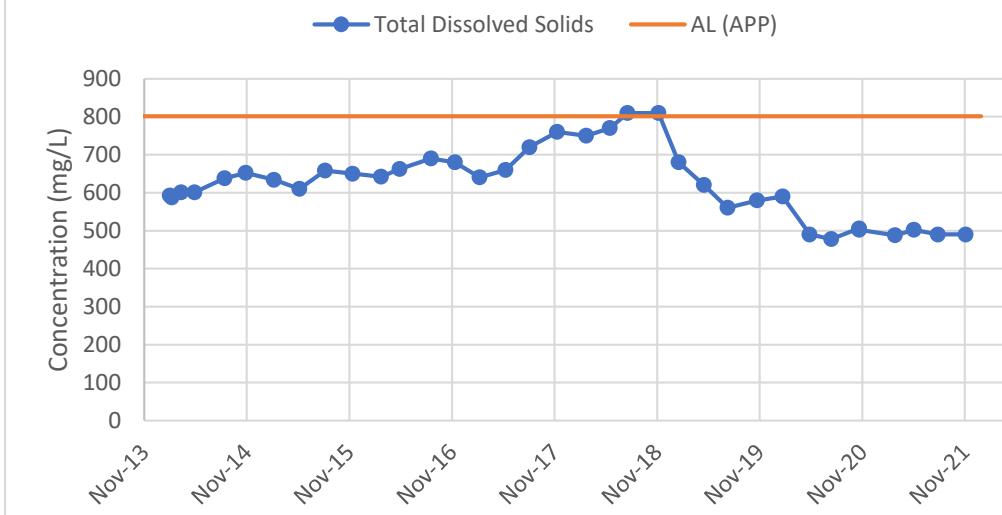


Figure 32c. Field pH

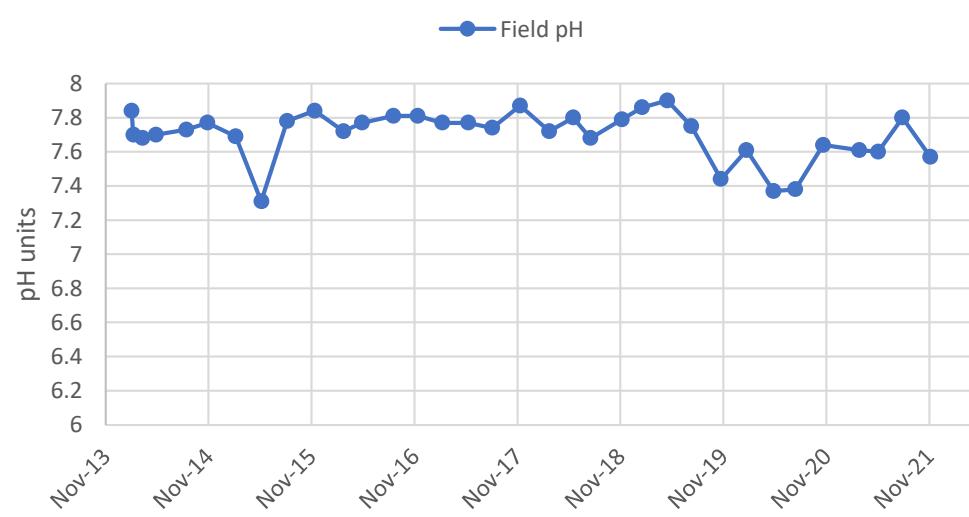
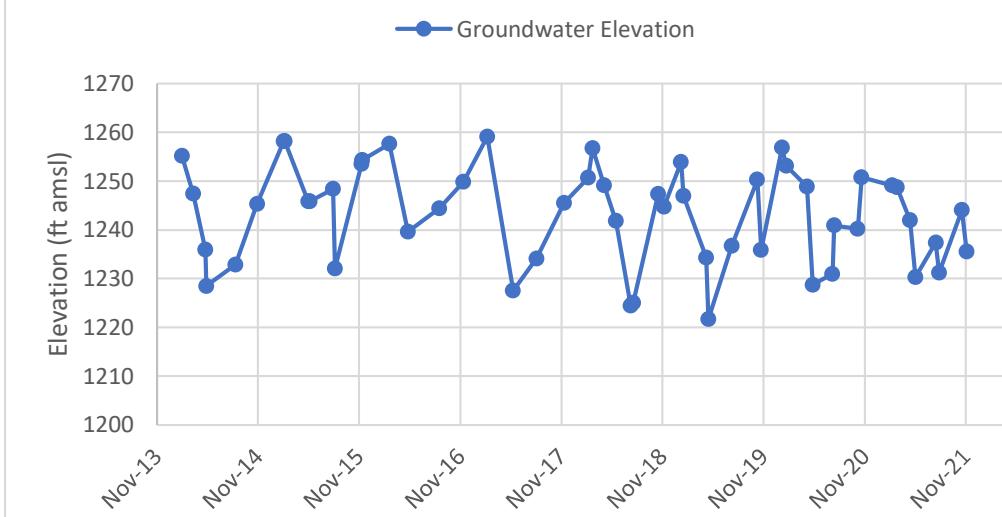


Figure 32d. Groundwater Elevation



Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

P19-1-O QUARTERLY CONCENTRATION GRAPHS

Figure 33a. Sulfate

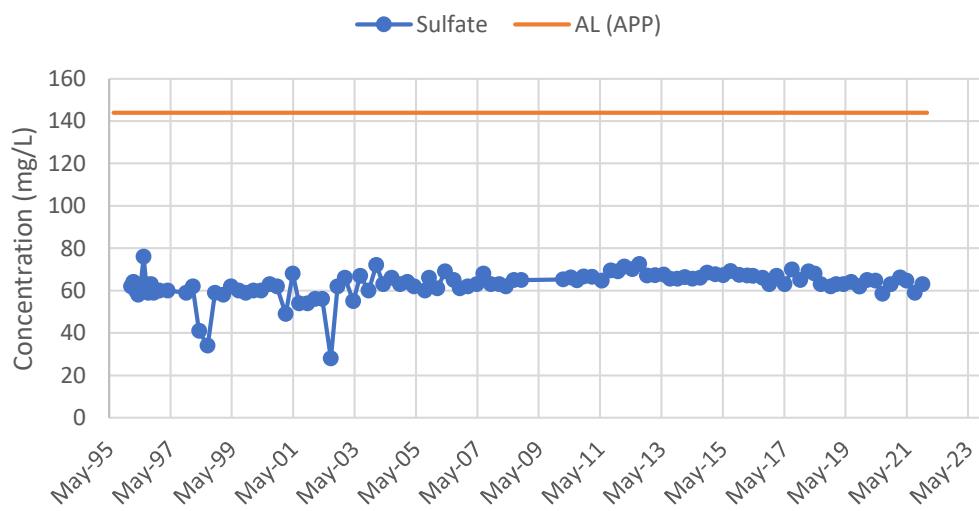


Figure 33b. Total Dissolved Solids

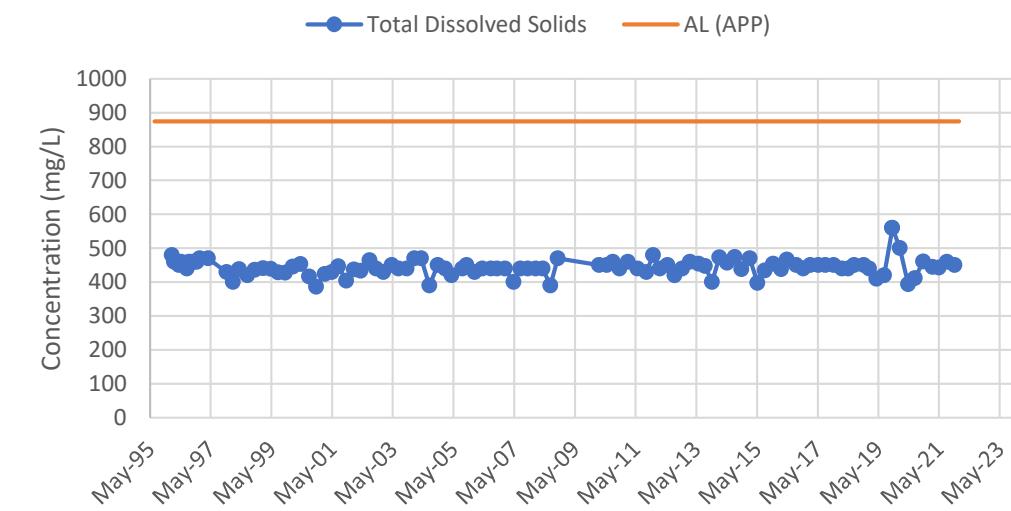


Figure 33c. Field pH

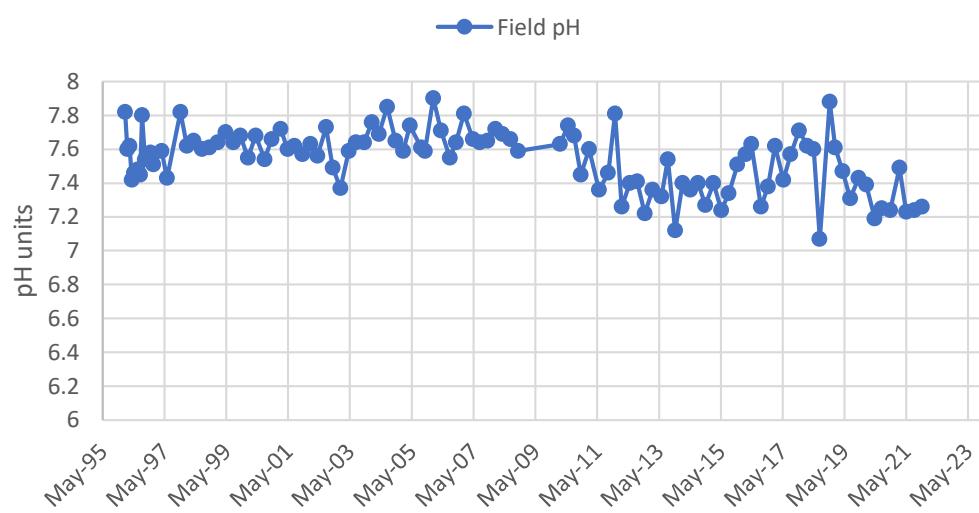
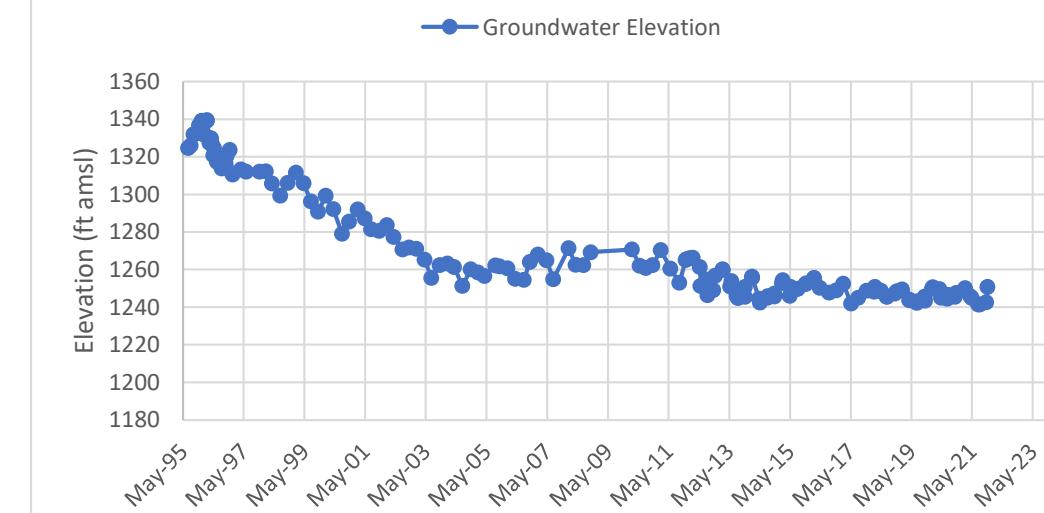


Figure 33d. Groundwater Elevation

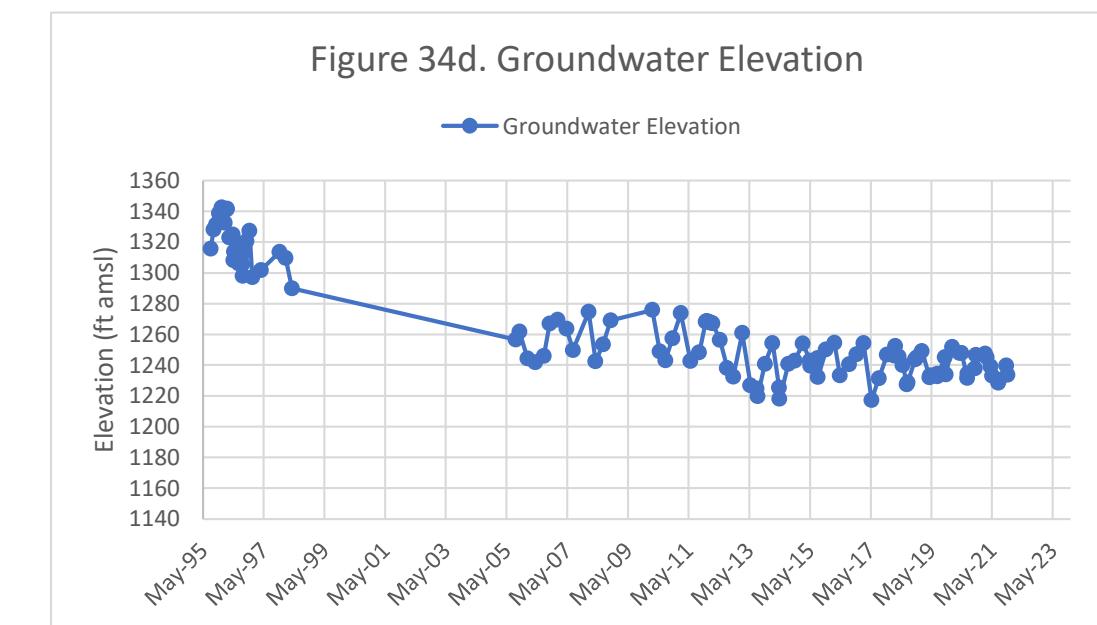
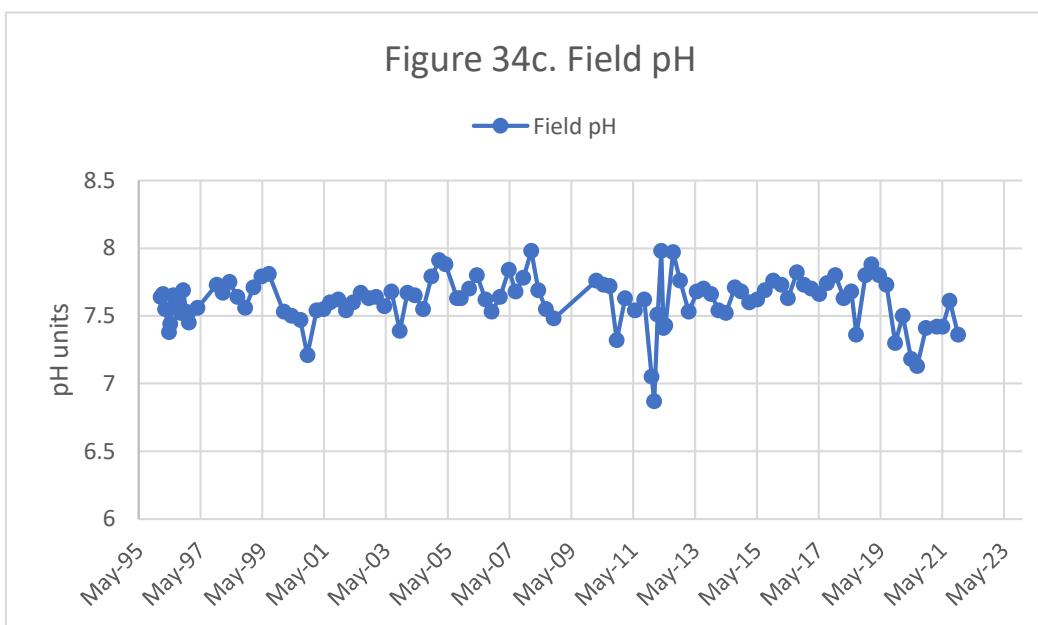
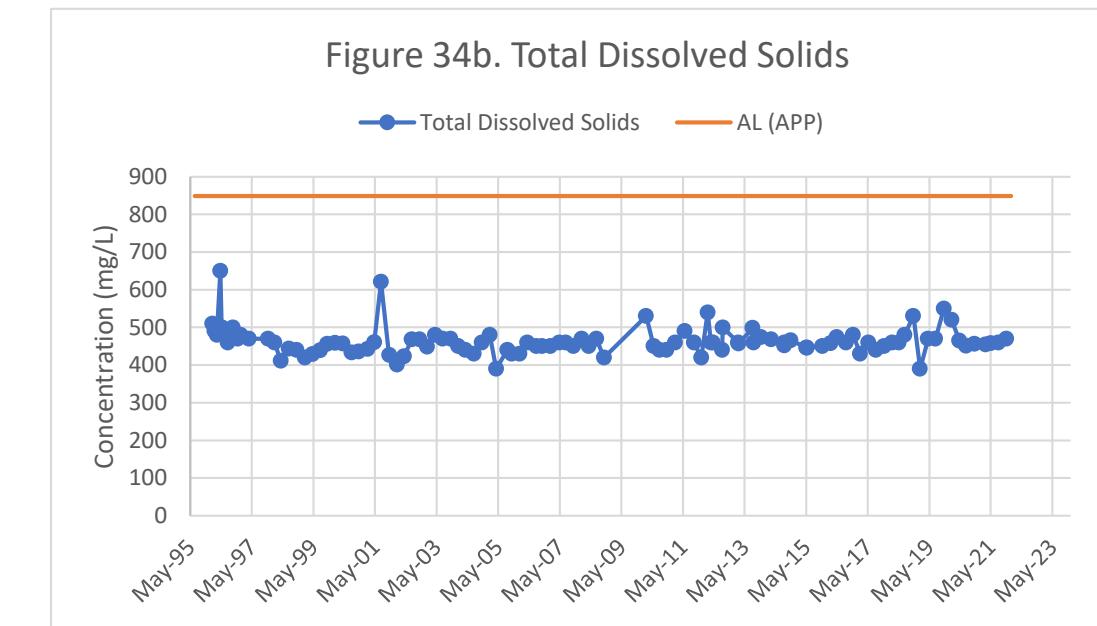
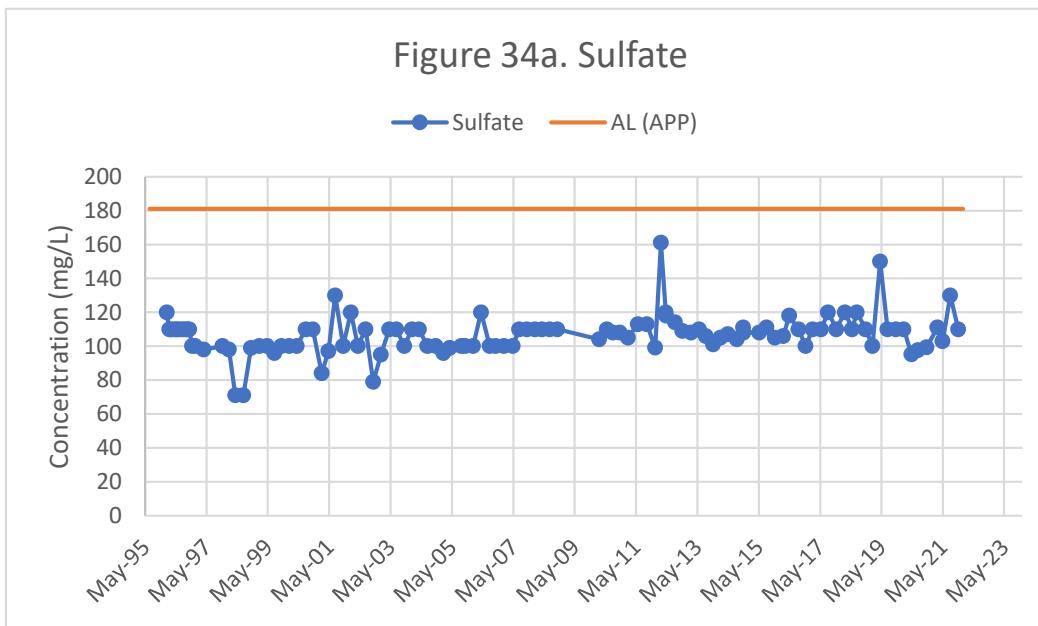


Notes:

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

P49-O QUARTERLY CONCENTRATION GRAPHS



Notes:

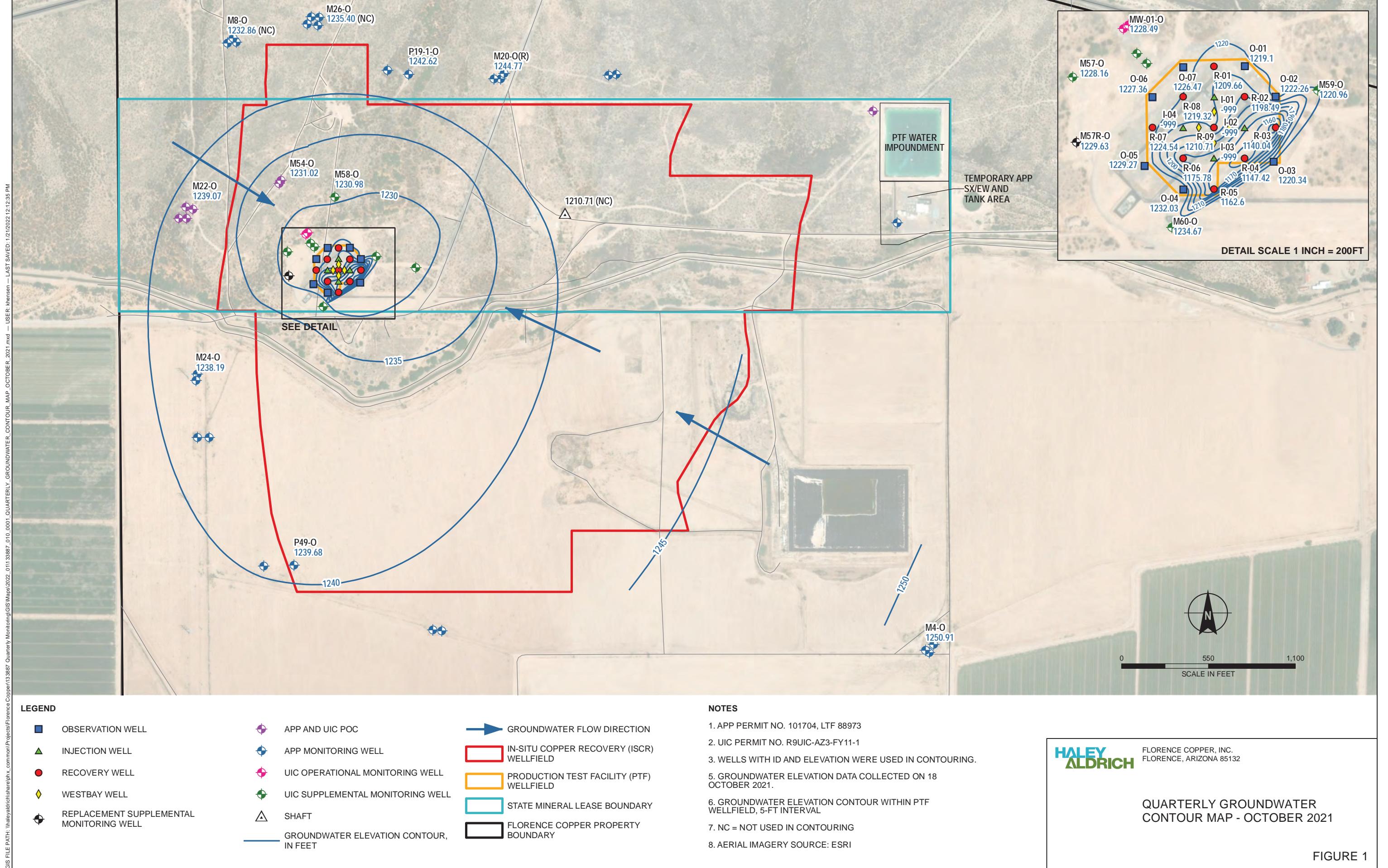
Historical outliers removed from graphs for visual representation, but are maintained in the dataset.

AL = Alert level

APP = Aquifer Protection Permit No. P-101704

ATTACHMENT 8

Quarterly Groundwater Elevation Contour Map



ATTACHMENT 9

Table of Wells in the Discharge Impact Area

Q4 2021 MONITORING WELLS WITHIN**THE DISCHARGE IMPACT AREA**

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 1. Monitoring Wells Within the Discharge Impact Area

Well ID	Latitude	Longitude	Well Depth (feet)
M54-LBF	33°03'7.07"N	111°26'9.29"W	629
M54-O	33°03'6.91"N	111°26'9.22"W	1199
M55-UBF	33°03'1.99"N	111°26'6.18"W	261
M56-LBF	33°03'2.21"N	111°26'6.44"W	340
M57-O	33°03'1.88"N	111°26'8.39"W	1200
M57R-O	33°03'0.31"N	111°26'8.16"W	1200
M58-O	33°03'5.20"N	111°26'4.94"W	1200
M59-O	33°03'1.58"N	111°26'2.25"W	1200
M60-O	33°02'58.70"N	111°26'5.78"W	1201
M61-LBF	33°03'0.85"N	111°25'58.92"W	630
MW-01-LBF	33°03'02.9442"N	111°26'07.1046"W	440
MW-01-O	33°03'03.045"N	111°26'06.9786"W	1200
P49-O	33°02'42"N	111°26'07"W	1242

**Q4 2021 WATER LEVELS WITHIN
THE DISCHARGE IMPACT AREA**

FLORENCE COPPER INC.
FLORENCE, ARIZONA

Table 2. Water Levels Within the Discharge Impact Area

Well ID	Date	Depth to Water (feet)	Description of Measuring Point	Elevation of Measuring Point (feet amsl)	Water Level Elevation (feet amsl)
M54-LBF	10/18/2021	237.22	TOC	1481.92	1244.70
M54-LBF	10/21/2021	236.58	TOC	1481.92	1245.34
M54-O	10/18/2021	251.45	TOC	1482.47	1231.02
M54-O	10/25/2021	250.99	TOC	1482.47	1231.48
M54-O	11/10/2021	263.02	TOC	1482.47	1219.45
M55-UBF	10/18/2021	231.28	TOC	1479.14	1247.86
M55-UBF	10/25/2021	232.35	TOC	1479.14	1246.79
M55-UBF	11/09/2021	234.93	TOC	1479.14	1244.21
M56-LBF	10/18/2021	235.82	TOC	1478.65	1242.83
M56-LBF	10/26/2021	236.98	TOC	1478.65	1241.67
M56-LBF	11/09/2021	242.53	TOC	1478.65	1236.12
M57-O	10/18/2021	250.55	TOC	1478.71	1228.16
M57-O	10/20/2021	254.13	TOC	1478.71	1224.58
M57R-O	10/18/2021	248.66	TOC	1478.29	1229.63
M57R-O	10/26/2021	251.51	TOC	1478.29	1226.78
M57R-O	11/09/2021	263.60	TOC	1478.29	1214.69
M58-O	10/18/2021	250.10	TOC	1481.08	1230.98
M58-O	10/26/2021	251.79	TOC	1481.08	1229.29
M58-O	11/10/2021	261.28	TOC	1481.08	1219.80
M59-O	10/18/2021	259.23	TOC	1480.19	1220.96
M59-O	10/19/2021	259.23	TOC	1480.19	1220.96
M59-O	11/09/2021	284.65	TOC	1480.19	1195.54
M59-O	12/13/2021	273.48	TOC	1480.19	1206.71
M60-O	10/18/2021	242.69	TOC	1477.36	1234.67
M60-O	10/19/2021	242.95	TOC	1477.36	1234.41
M60-O	11/10/2021	255.23	TOC	1477.36	1222.13
M60-O	12/13/2021	244.63	TOC	1477.36	1232.73
M61-LBF	10/18/2021	241.48	TOC	1480.78	1239.30
M61-LBF	10/21/2021	240.31	TOC	1480.78	1240.47
MW-01-LBF	10/18/2021	235.01	TOC	1478.92	1243.91
MW-01-LBF	10/20/2021	234.69	TOC	1478.92	1244.23
MW-01-O	10/18/2021	250.58	TOC	1479.07	1228.49
MW-01-O	10/20/2021	251.60	TOC	1479.07	1227.47
MW-01-O	11/22/2021	247.98	TOC	1479.07	1231.09
MW-01-O	12/13/2021	252.09	TOC	1479.07	1226.98
P49-O	10/18/2021	223.44	TOM	1463.12	1239.68
P49-O	11/04/2021	229.43	TOM	1463.12	1233.69
Status of Local Production Wells					
BIA-10	10/18/2021			Not Pumping	
PW2-1	10/18/2021			Pumping	

Notes:

amsl = above mean sea level

TOC= top of casing

TOM = top of monument

ATTACHMENT 10

10A – Groundwater Sampling Results for POC Wells

10B – Summary of Quarterly Water Levels

ATTACHMENT 10A

Groundwater Sampling Results for POC Wells

TECHNICAL MEMORANDUM

28 January 2022
File No. 133887-012

TO: Florence Copper Inc.
Brent Berg, General Manager

FROM: Haley & Aldrich, Inc.
Laura Menken, R.G., Senior Technical Specialist
Mark Nicholls, R.G., Lead Hydrogeologist

SUBJECT: Florence Copper Project, Quarterly Compliance Monitoring Report
Aquifer Protection Permit (APP), Fourth Quarter 2021



Haley & Aldrich, Inc. has prepared this memorandum to present the results of the quarterly compliance groundwater monitoring conducted during the fourth quarter (Q4) 2021 at the Florence Copper Project. The Florence Copper Project is subject to two related permits issued by the Arizona Department of Environmental Quality (ADEQ) and the U.S. Environmental Protection Agency (USEPA).

APP Covering the 1997-98 BHP Pilot Facilities and Future Operations:

- ADEQ APP No. P-101704 (LTF 88973) dated 30 April 2021.

Permits Covering the Current Production Test Facility:

- ADEQ APP No. P-101704 (LTF 88973) dated 30 April 2021, and
- USEPA Underground Injection Control (UIC) Permit No. R9UIC-AZ3-FY11-1 dated 20 December 2016.

This report presents the results of the Q4 2021 groundwater monitoring activities required by the APP.

SAMPLING ACTIVITIES

During Q4 2021, monitoring was conducted at 32 point of compliance wells. Water levels were collected on 18 October 2021, and quarterly groundwater sampling was conducted between 19 October and 13 December 2021. Groundwater sampling and analysis was conducted in accordance with the requirements of Section 2.5.3 of APP No. P-101704.

The majority of the monitoring wells are equipped with low-flow bladder pumps. Low-flow sampling was conducted in accordance with Section 2.5.3 of the APP. Wells M14-GL, M16-GU(R), M20-O(R), M22-O, M24-O, O49-GL(R), and P49-O were equipped with stainless steel electric submersible pumps.

These wells were sampled by purging a minimum of three borehole volumes, except for well M20-O(R), which was purged dry for 2 consecutive days and allowed to recharge prior to sampling. No other modified sampling procedures were used.

Each sample was labeled, placed in a cooler with ice, maintained at 4 degrees Celsius ($^{\circ}\text{C}$) $\pm 2^{\circ}\text{C}$, and transported under chain of custody to Turner Laboratories, Inc. (Turner) for analysis. Samples were analyzed for the quarterly (Level 1) monitoring parameters listed in Section 4.0, Table 13 of the APP. The M4-O November monthly sample was also analyzed for the annual (Level 2) monitoring parameters listed in Section 4.0, Table 14 of the APP. Sample containers collected for radiological parameter analysis were labeled and transported under chain of custody directly to Radiation Safety Engineering, Inc., a subcontractor to the primary laboratory. Note that uranium activity and adjusted gross alpha are analyzed and reported only when gross alpha results exceed 12 picocuries per liter.

Monthly monitoring of well M4-O, which began in December 2020, was continued during Q4 2021 due to an APP alert level (AL) exceedance of magnesium confirmed in Q4 2020. Monthly samples collected from M4-O were analyzed for the quarterly (Level 1) monitoring parameters as discussed further below. Per Section 2.6.2.5.1. of the APP, one monthly sample was also analyzed for an annual suite. Well M4-O is an up-gradient well, and the observed exceedance is not the result of mineral production operations.

RESULTS

Field parameters collected during the sampling event are provided in Table 1.¹ The analytical results for magnesium, sulfate, fluoride, and total dissolved solids are provided in Table 2. The M4-O sample analyzed for a full annual suite is provided in Table 3. The Q4 2021 results were compared to the ALs and aquifer quality limits (AQL) listed in the applicable tables in Section 4.0 of APP No. P-101704.

No AQL exceedances occurred during Q4 2021. There were no AL exceedances during Q4 2021, with the exception of magnesium at POC well M4-O. The magnesium exceedance at M4-O is discussed further below under the Contingency Sampling Plan section.

A quality assurance/quality control summary of the Q4 2021 data is provided in Appendix A.

CONTINGENCY SAMPLING PLANS

As described above, monthly monitoring was conducted at well M4-O during Q4 2021, as required by Section 2.6.2.5.1 of the APP.

¹ Note that turbidity was monitored as a field parameter in addition to field pH, temperature, and specific conductance, but is not required by APP No. P-101704 and is therefore not reported.

Well M4-O

Well M4-O had a confirmed magnesium AL exceedance in Q4 2020. In accordance with Section 2.6.2.5.1 of the APP, Florence Copper initiated monthly sampling of quarterly compliance monitoring parameters during Q4 2020.

During Q4 2021, magnesium concentrations in the monthly M4-O sampling events continued to exceed the APP AL of 15 milligrams per liter (mg/L), and ranged from 24 to 25 mg/L. All other parameters were below their respective ALs in each sample. The November monthly sample was analyzed for a full annual suite per Section 2.6.2.5.1 of the APP. No new exceedances were detected. Based on previous correspondence with ADEQ, notification of the monthly monitoring results is reported solely in the quarterly compliance groundwater monitoring report. The exceedance of magnesium at M4-O is not related to solutions migrating from the wellfield. Well M4-O is located upgradient and over 3,500 feet from the PTF wellfield, and hydraulic control was and continues to be maintained through PTF operations and PTF rinsing. In accordance with Section 2.6.2.5.1, monthly monitoring of the quarterly compliance monitoring parameters at M4-O will continue through Q1 2022.

Attachments:

- Table 1 – Q4 2021 Field Parameters
- Table 2 – Q4 2021 Quarterly (Level 1) Analytical Parameters
- Table 3 – Q4 2021 M4-O Annual Parameters
- Appendix A – Data Quality Assurance/Quality Control Summary

TABLES

TABLE 1
Q4 2021 FIELD PARAMETERS
FLORENCE COPPER INC.
FLORENCE, ARIZONA

Location	Sample Date	Temperature, Field Deg C	Temperature, Field Deg F	pH, Field pH units	Specific Conductance, Field μmhos/cm
M1-GL	10/28/2021	23.7	74.7	6.59	1,328
M2-GU	10/27/2021	21.9	71.4	7.19	1,785
M3-GL	10/27/2021	22.3	72.1	7.15	1,563
M4-O	10/19/2021	24.3	75.7	7.06	1,700
M4-O ⁽¹⁾	11/11/2021	22.5	72.5	7.00	1,947
M4-O ⁽¹⁾	12/13/2021	22.3	72.1	6.90	2,000
M6-GU	11/04/2021	26.3	79.3	8.01	759
M7-GL	11/08/2021	25.9	78.6	9.08	532
M8-O	11/08/2021	26.2	79.2	8.98	740
M14-GL	11/08/2021	27.0	80.6	8.25	877
M15-GU	11/03/2021	23.1	73.6	7.29	1,554
M16-GU(R)	10/28/2021	24.0	75.2	6.53	1,710
M17-GL	10/28/2021	23.5	74.3	7.81	820
M18-GU	11/22/2021	23.1	73.6	7.54	1,948
M19-LBF	11/02/2021	24.5	76.1	7.55	854
M20-O(R)	10/21/2021	24.5	76.1	7.03	845
M21-UBF	11/02/2021	23.9	75.0	7.15	1,736
M22-O	10/26/2021	28.3	82.9	8.12	829
M22-O ⁽²⁾	11/10/2021	28.4	83.1	8.05	842
M23-UBF	11/03/2021	23.5	74.3	6.94	1,990
M23-UBE ⁽³⁾	12/28/2021	22.2	72.0	7.14	2,102
M24-O	11/22/2021	30.1	86.2	7.92	1,874
M25-UBF	10/28/2021	23.2	73.8	6.32	2,612
M26-O	11/01/2021	25.2	77.4	8.79	557
M27-LBF	11/01/2021	24.9	76.8	7.31	1,885
M28-LBF	11/01/2021	25.2	77.4	9.00	686
M29-UBF	11/01/2021	25.3	77.5	7.08	1,830
M30-O	11/02/2021	24.3	75.7	7.29	917
M31-LBF	11/02/2021	24.8	76.6	7.19	1,537
M52-UBF	10/27/2021	23.9	75.0	7.28	1,530
M52-UBE ⁽⁴⁾	11/11/2021	22.5	72.5	7.17	1,625
M54-LBF	10/21/2021	25.6	78.1	7.07	1,598
M54-O	10/25/2021	26.8	80.2	7.58	788
M54-O ⁽⁵⁾	11/10/2021	22.9	73.2	8.18	786
O19-GL	11/04/2021	24.3	75.7	7.50	872
O49-GL(R)	11/04/2021	26.1	79.0	7.57	926
P19-1-O	11/03/2021	24.7	76.5	7.26	800
P49-O	11/04/2021	28.0	82.4	7.36	862

Notes:

(1) Increased frequency monitoring conducted on 11/11/2021 and 12/13/2021.

(2) Resampling conducted on 11/10/2021 due to shipping issue.

(3) Resampled to complete parameter suite.

(4) Resampling conducted on 11/11/2021 due to shipping issue.

(5) Resampling conducted on 11/10/2021 due to shipping issue.

μmhos/cm = micromhos per centimeter

Deg C = degrees Celsius

Deg F = degrees Fahrenheit

TABLE 2

Q4 2021 QUARTERLY (LEVEL 1) ANALYTICAL PARAMETERS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Location ID	Sample Date	Sample Type	Magnesium, Dissolved		Sulfate		Fluoride			Total Dissolved Solids (TDS)	
			Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level	Aquifer Quality Limit	Concentration	Alert Level
M1-GL	10/28/2021	Primary	22	31	110	184.2	0.61	3.2	4.0	690	1028
M2-GU	10/27/2021	Primary	27	39	190	275	0.72	3.2	4.0	1,000	1496
M3-GL	10/27/2021	Primary	24	36	160	187	0.54	3.2	4.0	860	1157
M4-O	10/19/2021	Primary	24	15	170	405	0.80	--	5.1	960	1072
M4-O ⁽¹⁾	11/11/2021	Primary	25	15	220	405	0.67	--	5.1	1,000	1072
M4-O ⁽¹⁾	12/13/2021	Primary	26	15	200	405	0.74	--	5.1	1,000	1072
M6-GU	11/04/2021	Primary	2.2 J	44	49	86	0.56	3.2	4.0	320	620
M7-GL	11/08/2021	Primary	0.11 J	1	4.1 J	82	0.75	3.2	4.0	260	464
M8-O	11/08/2021	Primary	0.11 J	1	64	122	1.9	3.6	4.0	380	609
M14-GL	11/08/2021	Primary	1.9 J	23	54	144	0.57	3.2	4.0	380	874
M15-GU	11/03/2021	Primary	27	44	96	126	0.42 J	3.2	4.0	870	1359
M16-GU(R)	10/28/2021	Primary	32	52	150	248	0.47 J	3.2	4.0	910	1635
M17-GL	10/28/2021	Primary	4.6	9.3	80	209	0.56	3.2	4.0	420	831
M18-GU	11/22/2021	Primary	27	36	230	288	0.99	3.2	4.0	1,100	1323
M19-LBF	11/02/2021	Primary	10	21	37	89	1.2	3.2	4.0	420	794
M19-LBF	11/02/2021	Duplicate	10	21	38	89	0.35 J	3.2	4.0	420	794
M20-O(R)	10/21/2021	Primary	8.7	14	62	112	0.62	3.2	4.0	470	809
M21-UBF	11/02/2021	Primary	27	87	180	487	0.68	3.2	4.0	960	2867
M22-O	10/26/2021	Primary	6.1	8.6	70	86	0.68	3.2	4.0	430	1094
M23-UBF	11/03/2021	Primary	30	69	240	411	0.67	3.2	4.0	1,100	2392
M23-UBF	11/03/2021	Duplicate	32	69	240	411	0.69	3.2	4.0	1,100	2392
M23-UBF ⁽²⁾	12/28/2021	Primary	28	69	230	411	0.76	3.2	4.0	1,100	2392
M24-O	11/22/2021	Primary	9.7	19	700	1364	0.96	3.2	4.0	1,200	2363
M24-O	11/22/2021	Duplicate	11	19	700	1364	1.2	3.2	4.0	1,200	2363
M25-UBF	10/28/2021	Primary	43	76	230	387	0.61	3.2	4.0	1,500	2683
M26-O	11/01/2021	Primary	0.16 J	1	53	105	1.2	3.4	4.0	290	556
M27-LBF	11/01/2021	Primary	32	51	160	179	< 0.29	3.2	4.0	1,100	1745
M28-LBF	11/01/2021	Primary	0.98 J	2.6	6.5	81	0.65	3.2	4.0	320	610
M29-UBF	11/01/2021	Primary	28	84	170	456	0.60	3.2	4.0	990	2751
M30-O	11/02/2021	Primary	11	18	56	102	0.75	3.2	4.0	520	824
M31-LBF	11/02/2021	Primary	22	--	150	330	0.71	3.2	4.0	850	--
MS2-UBF	10/27/2021	Primary	22	45	150	351	0.79	3.2	4.0	860	1666
MS4-LBF	10/21/2021	Primary	23	46	170	329	0.65	3.2	4.0	860	1731
M54-O	10/25/2021	Primary	5.6	11	48	200	0.66	3.2	4.0	390	855
O19-GL	11/04/2021	Primary	9.5	17	53	99	0.69	3.2	4.0	440	770
O49-GL(R)	11/04/2021	Primary	7.9	18	56	181	0.65	3.2	4.0	490	849
P19-1-O	11/03/2021	Primary	4.9	23	63	144	1.6	3.2	4.0	450	874
P49-O	11/04/2021	Primary	3.4	6.2	110	181	1.3	3.2	4.0	470	801
P49-O	11/04/2021	Duplicate	3.4	6.2	110	181	0.83	3.2	4.0	460	801

Arizona Aquifer Water Quality Standard⁽³⁾

Notes:

(1) Increased frequency monitoring conducted on 11/11/2021 and 12/13/2021.

(2) Resampled to complete parameter suite.

(3) Arizona Aquifer Water Quality Standard (AWQS), Drinking Water Standard, December 31, 2016.

Alert Level Exceeded

J = estimated value

All results in milligrams per liter (mg/L).

Detects are **bolded**.

Non-detects are reported to the laboratory method detection limit (< MDL).

TABLE 3
Q4 2021 M4-O ANNUAL PARAMETERS
FLORENCE COPPER INC.
FLORENCE, ARIZONA

Parameter	Unit	APP Alert Level	APP AQL	M4-O
				11/11/2021
				Primary
Field Parameters				
Temperature, Field (Deg C)	Deg C	--	--	22.5
Turbidity, Field (NTU)	NTU	--	--	0.29
pH, Field (pH units)	pH units	--	--	7.00
Specific Conductance, Field ($\mu\text{S}/\text{cm}$)	$\mu\text{S}/\text{cm}$	--	--	1,947
Level 1 Parameters				
Magnesium, Dissolved	mg/L	15	--	25
Sulfate	mg/L	405	--	220
Fluoride	mg/L	--	5.1	0.67
Total Dissolved Solids (TDS)	mg/L	1072	--	1,000
Inorganic Parameters				
Alkalinity, Bicarbonate, Total	mg/L	--	--	230
Alkalinity, Carbonate, Total	mg/L	--	--	< 2
Calcium, Dissolved	mg/L	--	--	120
Chloride, Total	mg/L	--	--	260
Nitrate (as N)	mg/L	--	--	14
Potassium, Dissolved	mg/L	--	--	5.7
Sodium, Dissolved	mg/L	--	--	190
pH, Lab	pH units	--	--	7.3
Anion/Cation Ratio	%	--	--	5.98
Radionuclide Parameters				
Gross Alpha Analytes	pCi/L	15	--	7.8 ± 10.6
Radium-226 & 228	pCi/L	--	5	0.8 ± 0.2
Adjusted Gross Alpha Activity ⁽¹⁾	pCi/L	12	15	--
Uranium Isotopes ⁽¹⁾	pCi/L	--	--	--
Organic Parameters				
Benzene	$\mu\text{g}/\text{L}$	4	5	< 0.063
Ethylbenzene	$\mu\text{g}/\text{L}$	560	700	< 0.054
Toluene	$\mu\text{g}/\text{L}$	800	1000	< 0.057
Xylene (total)	$\mu\text{g}/\text{L}$	8000	10000	< 0.13
Total Petroleum Hydrocarbons - Diesel	mg/L	--	--	< 0.1
Trace Metal Parameters				
Aluminum, Dissolved	mg/L	0.71	--	< 0.013
Antimony, Dissolved	mg/L	0.005	0.006	0.000069 J
Arsenic, Dissolved	mg/L	0.026	0.05	0.0016
Barium, Dissolved	mg/L	1.6	2	0.036
Beryllium, Dissolved	mg/L	--	0.0053	< 0.000013
Cadmium, Dissolved	mg/L	--	0.04	< 0.00005
Chromium, Total ⁽²⁾	mg/L	0.08	0.1	0.00078
Cobalt, Dissolved	mg/L	0.005	--	0.000044 J
Copper, Dissolved	mg/L	0.51	--	0.0052
Iron, Dissolved	mg/L	2.2	--	< 0.0031
Lead, Dissolved	mg/L	0.026	0.05	< 0.000057
Manganese, Dissolved	mg/L	0.22	--	0.00037
Mercury, Dissolved	mg/L	0.0016	0.002	< 0.000041
Nickel, Dissolved	mg/L	0.08	0.1	0.0028
Selenium, Dissolved	mg/L	0.027	0.05	0.0017 J
Thallium, Dissolved	mg/L	0.0016	0.002	< 0.000023
Zinc, Dissolved	mg/L	2.5	--	0.0037 J
Uranium, Total	mg/L	--	--	0.0082

Notes:

(1) Total uranium isotopes are analyzed and adjusted gross alpha calculated when gross alpha concentration exceeds 12 pCi/L.

(2) Total (i.e., non-speciated) dissolved chromium

Alert Level Exceeded

$\mu\text{g}/\text{L}$ = micrograms per liter

AQL = Aquifer Quality Limit

APP = Aquifer Protection Permit No. 101704

mg/L = milligrams per liter

pCi/L = picocuries per liter

APPENDIX A

Data Quality Assurance/Quality Control Summary Memorandum



HALEY & ALDRICH, INC.
One Arizona Center
400 E. Van Buren St., Suite 545
Phoenix, AZ 85004
602.760.2450

MEMORANDUM

21 January 2022
File No. 133887-012

TO: Haley & Aldrich, Inc.
Laura Menken R.G.

FROM: Haley & Aldrich, Inc.
Alexis Rainery, Engineer
Katherine Miller, Project Manager

SUBJECT: Appendix A – Data Quality Assurance/Quality Control Summary

Analytical results for environmental samples collected during the fourth quarter 2021 compliance monitoring event were verified in accordance with guidance provided by the U.S. Environmental Protection Agency (USEPA, 2012).¹ For each laboratory data package, the following quality control/quality assurance criteria from the analysis of the project samples were reviewed:

- Completeness with the chain of custody (COC);
- Comparison of reporting limits to alert levels (AL) and aquifer quality limits (AQL);
- Holding times/preservation;
- Blank sample analysis;
- Laboratory control samples;
- Matrix spike samples;
- Laboratory and field duplicate sample analysis; and
- Verification of laboratory report data.

Sample data were qualified by the laboratory in accordance with laboratory standard operating procedures (SOP). Based on a check of the data qualifiers assigned to the project sample results, these flags were applied to the reported results in accordance with the laboratory-specific SOP.

¹ USEPA, 2012. USEPA Region 9 Guidance for Quality Assurance Program Plans, R9QA/03.2. March.

COMPLETENESS WITH CHAIN OF CUSTODY

Samples were collected, preserved, and shipped following standard COC protocol. Samples were also received appropriately, identified correctly, and analyzed according to the COC. COCs were appropriately signed and dated by the field and/or laboratory personnel. The following exceptions were noted:

- For lab reports 21J0622, 21J0681, and 21J0651, diesel range organics by method USEPA 8015D were cancelled due to a shipping issue that caused an exceeded hold time. The following samples are included in the identified laboratory reports: M55-UBF, M56-LBF, M54-O, M58-O, M22-O, and M52-UBF. The wells were resampled and reanalyzed to resolve the data gap.

REPORTING LIMITS

The reporting limits and/or method detection limits were at or below the applicable ALs and AQLs.

HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol with the following exceptions:

Laboratory Report	Method	Matrix	Holding Time	Preservation	Sample ID, Violation, Qualification
21J0651	USEPA 300.0	Water	48 hours	Cool to $\leq 6^{\circ}\text{C}$	Nitrate by method USEPA 300.0 was reanalyzed outside the 48-hours hold time for the following sample: M4-O-111121
21J0589	All methods	Water	Various	Cool to $\leq 6^{\circ}\text{C}$	The cooler containing the following sample was received warm at 7.1 degrees Celsius ($^{\circ}\text{C}$): M20-O(R)
21J0681	All methods	Water	Various	Cool to $\leq 6^{\circ}\text{C}$	The cooler containing the following sample was received warm at 6.2 $^{\circ}\text{C}$: M52-UBF
21J0588	All methods	Water	Various	Cool to $\leq 6^{\circ}\text{C}$	The cooler containing the following sample was received warm at 7.1 $^{\circ}\text{C}$: M54-LBF-102121
21J0589	All methods	Water	Various	Cool to $\leq 6^{\circ}\text{C}$	The cooler containing the following sample was received warm at 7.1 $^{\circ}\text{C}$: M20-O(R)-102121

Laboratory Report	Method	Matrix	Holding Time	Preservation	Sample ID, Violation, Qualification
21J0681	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.2 °C: M52-UBF-102721
21J0682	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.2 °C: M2-GU-102721 M3-GL-102721
21J0721	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.5 °C: M16-GU(R)-102821 M1-GL-102821 M25-UBF-102821 M17-GL-102821
21K0184	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.4 °C: M15-GU-110321
21K0185	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.4 °C: P19-1-O-110321 M23-UBF-110321 M281-UBF-110321
21K0294	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.1 °C: M14-GL-110821
21K0295	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.1 °C: M7-GL-110821 M8-O-110821
21K0426	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 7.2 °C: M4-O-111121
21K0427	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 7.2 °C: M52-UBF-111121
21K0637	All methods	Water	Various	Cool to ≤ 6 °C	The cooler containing the following sample was received warm at 6.6 °C: M18-GU-112221 M24-O-112221 M105-112221

BLANK SAMPLE ANALYSIS

Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Laboratory Report	Associated Sample ID(s)	Batch ID	Analyte Detected in Method Blank	Concentration (mg/L, unless noted)
21K0426	M4-O-111121	2111171	Nickel	0.000035 J mg/L

LABORATORY CONTROL AND MATRIX SPIKE SAMPLES

Compounds associated with the laboratory control sample, matrix spike, and matrix spike duplicate analyses exhibited recoveries and relative percent differences (RPD) within the specified limits with the following exceptions:

Laboratory Report	Sample ID	Sample Type	Method	Batch ID	Analyte	%R, RPD	Acceptable %R, RPD
21K0294	M14-GL-110821	MS	USEPA 200.7	211085	Sodium	63%	70-130%
21K0295	M8-O-110821	MS	USEPA 300.0	2111110	Sulfate	13; RPD=22	80-120%
21K0426	M4-O-111121	LCS/LCSD	USEPA 245.1	2111314	Mercury	130%/135%	85-115%
		LCS/LCSD	USEPA 300.0	2111180	Nitrogen, Nitrite	114%/116%	90-110%
		LCSD		2111180	Fluoride	89%	90-110%

Notes:

% = percent

%R = percent recovery

MS = matrix spike

MSD = matrix spike duplicate

RPD = relative percent difference

USEPA = U.S. Environmental Protection Agency

LABORATORY AND FIELD DUPLICATE SAMPLES

The RPDs for laboratory duplicate analysis were all below 20 percent for water (or the absolute difference rule was satisfied if detects were less than 5 times the reporting limit).

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The following samples were collected for field duplicate analysis and the RPDs were

all below 35 percent for water (or the absolute difference rule was satisfied if detects were less than 5 times the reporting limit) with the following exceptions:

Primary Sample ID	Duplicate Sample ID	Methods for Which Field Duplicates Were Analyzed	
P49-O-110421	M104-110421	Anions by USEPA 300.0 Total Dissolved Solids by SM 2540C Metals by EPA 200.7 and USEPA 200.8	
M24-O-112221	M105-112221		
M23-UBF-110321	M281-UBF-110321		
M19-LBF-110221	ME9-L8F-110221		
Notes:			
SM = Standard Method			
USEPA = U.S. Environmental Protection Agency			

Analyte (mg/L)	Primary Sample ID	Duplicate Sample ID	RPD	Qualification
	M19-LBF-110221	ME9-L8F-110221		
Fluoride	1.2	0.35	NA	Abs. diff. > RL

VERIFICATION OF LABORATORY REPORT DATA

A minimum of 10 percent of the data reported by the laboratory were verified against the electronic data deliverables.

\haleyaldrich.com\share\phx_common\Projects\Florence Copper\133887 Quarterly Monitoring\Deliverables\4Q 2021 Reports\APP Report\Attachments\APP 10A - Quarterly Compliance Monitoring Report\Appendix A APP QA_QC Summary Q4_2021_D3.docx

ATTACHMENT 10B

Summary of Quarterly Water Levels

SUMMARY OF QUARTERLY WATER LEVELS

Page 1 of 3

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Location ID	Date	Depth to Water (feet)	Description of Measuring Point	Elevation of Measuring Point (feet amsl)	Water Level Elevation (feet amsl)
M14-GL	10/18/2021	236.94	TOC	1477.12	1239.59
M14-GL	11/08/2021	NM	TOC	1477.12	NM
M15-GU	10/18/2021	232.88	TOC	1476.53	1243.65
M15-GU	11/03/2021	233.49	TOC	1476.53	1243.04
M16-GU(R)	10/18/2021	224.45	TOC	1466.16	1241.71
M16-GU(R)	10/28/2021	227.69	TOC	1468.57	1240.88
M17-GL	10/18/2021	224.82	TOM	1466.16	1241.34
M17-GL	10/28/2021	228.07	TOM	1466.16	1238.09
M18-GU	10/18/2021	213.65	TOC	1462.4	1248.75
M18-GU	11/22/2021	216.61	TOC	1462.4	1245.79
M19-LBF	10/18/2021	244.43	TOM	1490.05	1245.62
M19-LBF	11/02/2021	246.71	TOM	1490.05	1243.34
M1-GL	10/18/2021	217.25	TOC	1461.75	1244.50
M1-GL	10/28/2021	223.60	TOC	1461.75	1238.15
M20-O(R)	10/18/2021	245.65	TOC	1490.42	1244.77
M20-O(R)	10/21/2021	NM	TOC	1490.42	NM
M20-O(R)	10/18/2021	245.65	TOC	1490.42	1244.33
M20-O(R)	11/19/2021	248.91	TOC	1490.42	1241.07
M20-O(R)	12/21/2021	244.71	TOC	1490.42	1245.27
M21-UBF	10/18/2021	243.12	TOM	1489.52	1246.40
M21-UBF	11/02/2021	244.03	TOM	1489.52	1245.49
M22-O	10/18/2021	239.51	TOM	1478.58	1239.07
M22-O	10/26/2021	238.59	TOM	1478.58	1239.99
M22-O	11/10/2021	245.87	TOM	1478.58	1232.71
M23-UBF	10/18/2021	221.41	TOM	1477.61	1256.20
M23-UBF	11/03/2021	221.58	TOM	1477.61	1256.03
M23-UBF	12/28/2021	221.35	TOM	1477.61	1256.26
M24-O	10/18/2021	231.10	TOM	1469.29	1238.19
M24-O	11/22/2021	235.62	TOM	1469.29	1233.67
M24-O	10/18/2021	231.10	TOM	1469.29	1238.19
M24-O	11/19/2021	239.30	TOM	1469.29	1229.99
M24-O	12/21/2021	230.24	TOM	1469.29	1239.05
M25-UBF	10/18/2021	215.68	TOM	1469.27	1253.59
M25-UBF	10/28/2021	215.98	TOM	1469.27	1253.29
M26-O	10/18/2021	253.01	TOM	1488.41	1235.40
M26-O	11/01/2021	253.69	TOM	1488.41	1234.72
M27-LBF	10/18/2021	244.73	TOM	1488.85	1244.12
M27-LBF	11/01/2021	245.15	TOM	1488.85	1243.70
M28-LBF	10/18/2021	246.03	TOM	1489.45	1243.42
M28-LBF	11/01/2021	246.09	TOM	1489.45	1243.36
M29-UBF	10/18/2021	244.90	TOM	1489.49	1244.59
M29-UBF	11/01/2021	254.19	TOM	1489.49	1235.30
M2-GU	10/18/2021	210.20	TOC	1460.8	1250.60
M2-GU	10/27/2021	210.48	TOC	1460.8	1250.32
M30-O	10/18/2021	238.94	TOM	1486.36	1247.42
M30-O	11/02/2021	241.95	TOM	1486.36	1244.41
M31-LBF	10/18/2021	239.49	TOM	1485.93	1246.44
M31-LBF	11/02/2021	240.91	TOM	1485.93	1245.02

SUMMARY OF QUARTERLY WATER LEVELS

Page 2 of 3

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Location ID	Date	Depth to Water (feet)	Description of Measuring Point	Elevation of Measuring Point (feet amsl)	Water Level Elevation (feet amsl)
M32-UBF	10/18/2021	Dry	Not Sampled	1475.09	Dry
M33-UBF	10/18/2021	Dry	Not Sampled	1490.1	Dry
M3-GL	10/18/2021	208.19	TOC	1460.74	1252.55
M3-GL	10/27/2021	211.28	TOC	1460.74	1249.46
M4-O	10/18/2021	209.69	TOC	1460.6	1250.91
M4-O	10/19/2021	210.32	TOC	1460.6	1250.28
M4-O	11/11/2021	212.45	TOC	1460.6	1248.15
M4-O	12/13/2021	208.62	TOC	1460.6	1251.98
M4-O	10/18/2021	209.69	TOC	1460.60	1250.91
M4-O	11/19/2021	212.57	TOC	1460.60	1248.03
M4-O	12/21/2021	210.24	TOC	1460.60	1250.36
M52-UBF	10/18/2021	234.72	TOC	1485.04	1250.32
M52-UBF	10/27/2021	235.09	TOC	1485.04	1249.95
M52-UBF	11/11/2021	235.32	TOC	1485.04	1249.72
M54-LBF	10/18/2021	237.22	TOC	1481.92	1244.70
M54-LBF	10/21/2021	236.58	TOC	1481.92	1245.34
M54-O	10/18/2021	251.45	TOC	1482.47	1231.02
M54-O	10/25/2021	250.99	TOC	1482.47	1231.48
M54-O	11/10/2021	263.02	TOC	1482.47	1219.45
M54-O	10/18/2021	251.45	TOC	1482.47	1231.02
M54-O	11/19/2021	248.61	TOC	1482.47	1233.86
M54-O	12/21/2021	255.21	TOC	1482.47	1227.26
M57-O	10/18/2021	250.55	TOC	1478.71	1228.16
M57-O	11/19/2021	248.52	TOC	1478.71	1230.19
M57-O	12/21/2021	257.17	TOC	1478.71	1221.54
M57R-O	10/18/2021	248.66	TOC	1478.29	1229.63
M57R-O	11/19/2021	247.40	TOC	1478.29	1230.89
M57R-O	12/21/2021	255.45	TOC	1478.29	1222.84
M58-O	10/18/2021	250.10	TOC	1481.08	1230.98
M58-O	11/19/2021	247.88	TOC	1481.08	1233.20
M58-O	12/21/2021	254.31	TOC	1481.08	1226.77
M59-O	10/18/2021	259.23	TOC	1480.19	1220.96
M59-O	11/19/2021	256.39	TOC	1480.19	1223.80
M59-O	12/21/2021	269.21	TOC	1480.19	1210.98
M60-O	10/18/2021	242.69	TOC	1477.36	1234.67
M60-O	11/19/2021	245.43	TOC	1477.36	1231.93
M60-O	12/21/2021	247.71	TOC	1477.36	1229.65
M6-GU	10/18/2021	240.71	TOC	1482.45	1241.74
M6-GU	11/04/2021	240.59	TOC	1482.45	1241.86
M7-GL	10/18/2021	243.69	TOC	1481.22	1237.53
M7-GL	11/08/2021	244.55	TOC	1481.22	1236.67
M8-O	10/18/2021	247.60	TOC	1480.46	1232.86
M8-O	11/08/2021	248.52	TOC	1480.46	1231.94
MW-01-O	10/18/2021	250.58	TOC	1479.07	1228.49
MW-01-O	11/19/2021	247.65	TOC	1479.07	1231.42
MW-01-O	12/21/2021	257.04	TOC	1479.07	1222.03
O19-GL	10/18/2021	241.32	TOM	1483.28	1241.96
O19-GL	11/04/2021	243.82	TOM	1483.28	1239.46

SUMMARY OF QUARTERLY WATER LEVELS

Page 3 of 3

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Location ID	Date	Depth to Water (feet)	Description of Measuring Point	Elevation of Measuring Point (feet amsl)	Water Level Elevation (feet amsl)
O49-GL(R)	10/18/2021	221.79	TOM	1465.83	1244.04
O49-GL(R)	11/04/2021	230.26	TOM	1465.83	1235.57
P19-1-O	10/18/2021	242.10	TOM	1484.72	1242.62
P19-1-O	11/03/2021	233.97	TOM	1484.72	1250.75
P19-1-O	10/18/2021	242.10	TOM	1484.72	1242.62
P19-1-O	11/19/2021	245.07	TOM	1484.72	1239.65
P19-1-O	12/21/2021	240.98	TOM	1484.72	1243.74
P49-O	10/18/2021	223.44	TOM	1463.12	1239.68
P49-O	11/04/2021	229.43	TOM	1463.12	1233.69
Shaft	10/18/2021	233.44	TOS	1480.40	1210.71
Shaft	11/19/2021	243.53	TOS	1480.40	1233.95
Shaft	12/21/2021	233.34	TOS	1480.40	1247.06
Status of Local Production Wells					
BIA-9R	10/18/2021			Not Pumping	
BIA-10	10/18/2021			Not Pumping	
PW2-1	10/18/2021			Pumping	
WW-4	10/18/2021			Not Pumping	

Notes:*amsl = above mean sea level**TOC = top of casing**TOM = top of monument*

ATTACHMENT 11

Resource Block Status Report

Q4 2021 RESOURCE BLOCK STATUS SUMMARY

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Resource Block ⁽¹⁾	Block Status	Notes
045	Rinsing	Only those wells associated with the Production Test Facility have been constructed within the identified resource blocks.
053	Rinsing	
054	Rinsing	

Notes:*(1) Resource block numbering provided in Figure 1 attached**At this time, no other resource blocks are planned for immediate construction.*

ATTACHMENT 12

Monthly ISCR Wellfield Water Analytical Results

Q4 2021

MONTHLY ISCR WELLFIELD WATER ANALYTICAL RESULTS

FLORENCE COPPER INC.

FLORENCE, ARIZONA

Table 1. Treated ISCR Wellfield Water

Monitoring Parameters	Maximum Ambient Water Quality ⁽¹⁾	Analytical Results		
		10/21/2021	11/17/2021	12/13/2021
Metals				
Aluminum	0.08	< 2.0	< 2.0	< 2.0
Antimony	0.0005	< 0.20	< 0.20	< 0.2
Arsenic	0.0029	< 0.040	< 0.040	< 0.040
Barium	0.11	< 0.050	< 0.050	< 0.050
Beryllium	0.0005	< 0.0020	< 0.0020	< 0.0020
Cadmium	0.0014	< 0.0020	< 0.0020	< 0.0020
Chromium	0.01	< 0.030	< 0.030	< 0.030
Cobalt	0.0081	< 0.10	< 0.10	< 0.10
Copper	1.9	0.1	0.081	0.62
Iron	0.3	< 0.30	< 0.30	< 0.30
Lead	0.001	< 0.040	< 0.040	< 0.040
Magnesium	30	< 3.0	< 3.0	< 3.0
Manganese	0.12	< 0.020	< 0.020	< 0.020
Mercury	0.001	< 0.0010	< 0.0010	< 0.0010
Molybdenum	--	< 0.010	< 0.010	< 0.010
Nickel	0.015	< 0.050	< 0.050	< 0.050
Selenium	0.0039	< 0.040	< 0.040	< 0.040
Thallium	0.001	< 0.050	< 0.050	< 0.050
Uranium	--	0.01	0.01	0.00081
Zinc	1.9	< 0.040	< 0.040	< 0.040
Inorganic Parameters				
Total Alkalinity	220	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
Bicarbonate	220	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
Carbonate	20	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
Hydroxide	2	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
pH (pH Units)	8.7	2.67	2.55	2.57
Temperature (°C)	32.4	22.4	24.3	25.7
Conductivity	1800	1148	1186	1157
Calcium	140	< 4.0	< 4.0	< 4.0
Chloride	340	73	87	79
Fluoride	0.89	0.8	< 0.50	< 0.50
Potassium	11	< 5.0	< 5.0	< 5.0
Sodium	180	< 5.0	< 5.0	< 5.0
TDS	1100	110	< 20	28
Nitrate (as N)	9.7	4.1	3.6	3.8
Nitrite (as N)	0.1	< 0.10	< 0.10	< 0.10
Sulfate	230	38	37	37
Organic Parameters				
Benzene	0.063	< 0.00050	< 0.00050	< 0.00050
Carbon Disulfide	--	NA ⁽³⁾	NA ⁽³⁾	NA ⁽³⁾
Ethylbenzene	0.054	< 0.00050	< 0.00050	< 0.00050
Naphthalene	--	< 0.002	< 0.002	< 0.002
n-octane	--	< 0.00050	< 0.00050	< 0.00050
Toluene	0.057	< 0.00050	< 0.00050	< 0.00050
Total Xylene	0.13	< 0.0015	< 0.0015	< 0.0015
Total Petroleum Hydrocarbons - Diesel	0.17	< 0.0001	< 0.0001	< 0.0001
Radionuclide Parameters				
Gross Alpha (pCi/L)	2.8	1.5 ± 0.6	< 1.0	1 ± 0.2
Uranium Isotopes (total) (pCi/L)	30.2	0.9 ± 0.3	< 0.4	0.8 ± 0.3
Adjusted Gross Alpha (pCi/L)	15.4	0.6 ± 0.7	< 1	0.2 ± 0.4
Gross Beta (pCi/L)	--	2.4	< 2.4	< 2.4
Radium Isotopes 226+228 (pCi/L)	6.2	0.6	< 0.6	< 0.6
Radon (pCi/L)	--	1560.0 ± 159.0	1811.1 ± 182.3	1447.2 ± 146.5

Notes:

(1) Maximum ambient water quality at the site pre-operation.

(2) Alkalinity analysis was not reported due to matrix interference. Sample pH was less than 4.5.

(3) No analysis for carbon disulfide in fourth quarter

All results in milligrams per liter (mg/L) unless otherwise noted.

Non-detects are reported to the laboratory reporting limit

Radionuclide data presented as result ± uncertainty

ISCR = in-situ copper recovery

pCi/L = picocuries per liter

ATTACHMENT 13

Well Abandonment Report
(Placeholder – Not Applicable for this Monitoring Period)